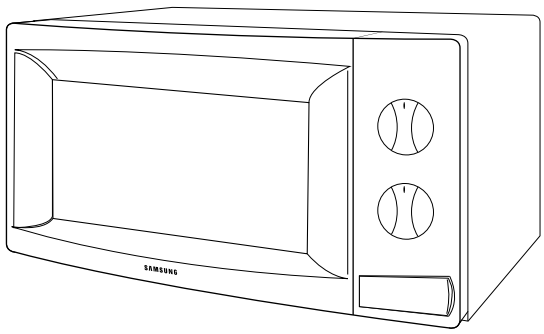
SAMSUNG

MICROWAVE OVEN

BASIC: CE2718NR
MODEL: CE2718NR
MODEL CODE: CE2718NR/SBW

SERVICE Manual

MICROWAVE OVEN



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Refer to the service manual in the GSPN(see rear cover) for the more information.

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PRECAUTIONS TO BE OBSERVED BEFORE AND DURING SERVICING TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY

(a) Do not operate or allow the oven to be operated with the door open.

(b) Make the following safety checks on all ovens to be serviced before activating the magnetron or other microwave source, and make repairs as necessary:
(1) Interlock operation,
(2) proper door closing,
(3) seal and sealing surfaces (arcing, wear, and other damage),
(4) damage to or loosening of hinges and latches,
(5) evidence of dropping or abuse.

(c) Before turning on microwave power for any service test or inspection within the microwave generating compartments, check the magnetron, wave guide or transmission line, and cavity for proper alignment, integrity, and connections.

(d) Any defective or misadjusted components in the interlock, monitor, door seal, and microwave generation and transmission systems shall be repaired, replaced, or adjusted by procedures described in this manual before the oven is released to the owner.

(e) A Microwave leakage check to verify compliance with the Federal performance standard should be performed on each oven prior to release to the owner.

1. Precaution

Follow these special safety precautions. Although the microwave oven is completely safe during ordinary use, repair work can be extremely hazardous due to possible exposure to microwave radiation, as well as potentially lethal high voltages and currents.

1-1 Safety precautions (⚠)

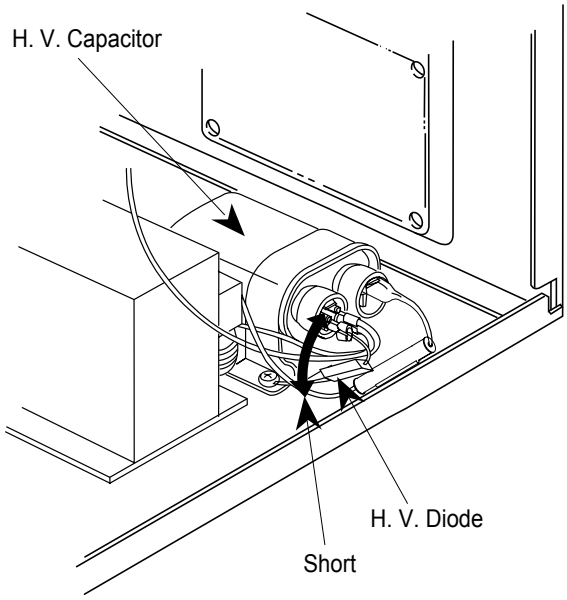
1. All repairs should be done in accordance with the procedures described in this manual. This product complies with Federal Performance Standard 21 CFR
2. Microwave emission check should be performed to prior to servicing if the oven is operative.
3. If the oven operates with the door open :Instruct the user not to operate the oven and contact the manufacturer and the center for devices and radiological health immediately.
4. Notify the Central Service Center if the microwave leakage exceeds 5 mW/cm2.
5. Check all grounds.
6. Do not power the MWO from a “2-prong” AC cord. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.
7. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including: nonmetallic control knobs and compartment covers.
8. Make sure that there are no cabinet openings through which people --particularly children--might insert objects and contact dangerous voltages. Examples: Lamp hole,ventilation slots.
9. Inform the manufacturer of any oven foundto have emission in excess of 5 mW/cm2 ,Make repairs to bring the unit into compliance at no cost to owner and try to determine cause. Instruct owner not to use oven until it has been brought into compliance.

   CENTRAL SERVICE CENTER
10. Service technicians should remove their watches while repairing an MWO.
11. To avoid any possible radiation hazard,replace parts in accordance with the wiring diagram. Also, use only the exact replacements for the following parts: Primary and secondary interlock switches, interlock monitor switch.
12. If the fuse is blown by the Interlock Monitor Switch: Replace all of the following at the same time: Primary, door sensing switch and power relay, as well as the Interlock Monitor Switch. The correct adjustment of these switches is described elsewhere in this manual. Make sure that the fuse has the correct rating for the particular model being repaired.
13. Design Alteration Warning: Use exact replacement parts only, i.e.,only those that are specified in thedrawings and parts lists of this manual. This is especially important for the Interlock switches, described above. Never alter or add to the mechanical or electrical design of the MWO. Any design changes or additions will void the manufacturer’s warranty. Always unplug the unit’s AC power cord from the AC power source before attempting to remove or reinstall any component or assembly.
14. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.
15. Some semiconductor (“solid state”) devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs). Examples include integrated circuits and field-effect transistors. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground.
16. Always connect a test instrument’s ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument’s ground lead last.
17. When checking the continuity of the witches or transformer, always make sure that the power is OFF, and one of the lead wires is disconnected.
18. Components that are critical for safety are indicated in the circuit diagram by shading, ⚠ or ⚠ .
19. Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

    NOTE : Connect the oven to a 20A. When connecting the oven to a 15A,make sure that circuit breaker can operate.

1-2 Special High Voltage Precautions

1. High Voltage Warning Do not attempt to measure any of the high voltages --this includes the filament voltage of the magnetron. High voltage is present during any cook cycle. Before touching any components or wiring, always unplug the oven and discharge the high voltage capacitor (See Figure 1-1)
2. The high-voltage capacitor remains charged about 30 seconds after disconnection. Short the negative terminal of the high-voltage capacitor to to the oven chassis. (Use a screwdriver.)
3. High voltage is maintained within specified limits by close-tolerance, safety-related components and adjustments. If the high voltage exceeds the specified limits, check each of the special components.



PRECAUTION

There exists HIGH VOLTAGE ELECTRICITY with high current capabilities in the circuits of the HIGH VOLTAGE TRANSFORMER secondary and filament terminals. It is extremely dangerous to work on or near these circuits with the oven energized.

DO NOT measure the voltage in the high voltage circuit including filament voltage of magnetron.

PRECAUTION

Servicemen should remove their watches whenever working close to or replacing the magnetron.

PRECAUTION

Never touch any circuit wiring with your hand nor with uninsulated tool during operation.

2. Specifications

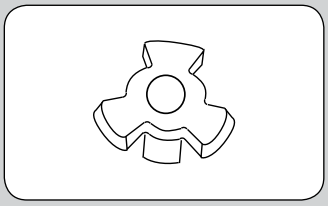
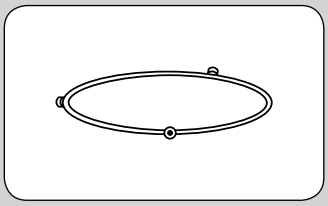
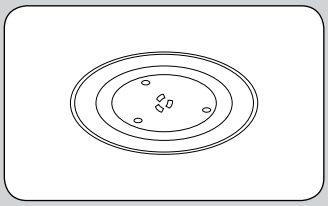
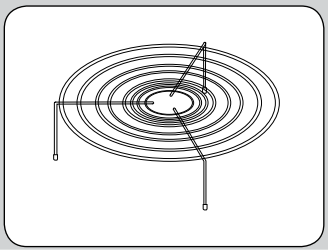
2-1 Features

Product Features
- Door Open Method : Push Button
- Microwave Distribution : Turn Table

2-2 Table of Specifications

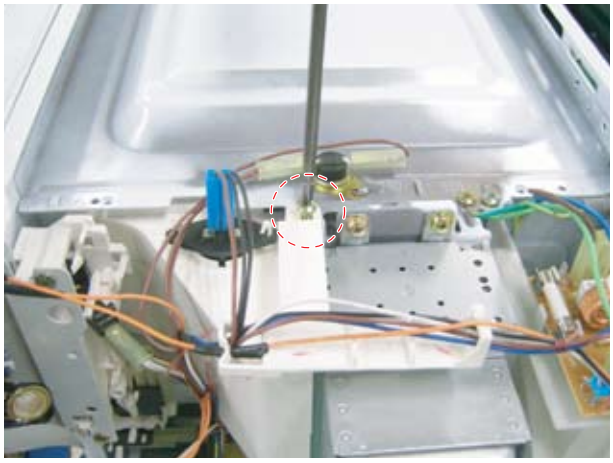
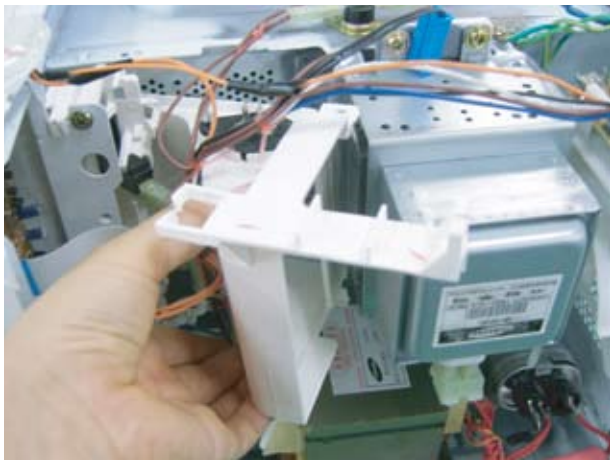
Items		Model	
		Model Basic	Model New
Model		CE2718NR/BWT	CE2718NR/SBW
Power Source		230V ~ 50 Hz	230V ~ 50 Hz
Power Consumption	Microwave	1200W	1200W
	Grill	1100W	1100W
	Combined Mode	2300W	2300W
Output Power		100 W / 750 W (IEC-705)	100 W / 750 W (IEC-705)
Operating Frequency		2450MHz	2450MHz
Export Zone		Russia	Uklane
Dimension (W x H x D)	Outside	489 x 275 x 383 mm	489 x 275 x 383 mm
	Oven cavity	306 x 211 x 320 mm	306 x 211 x 320 mm
Volume		20 liter	20 liter
Weight	Net	14.5Kg	14.5Kg

2-3 Accessory

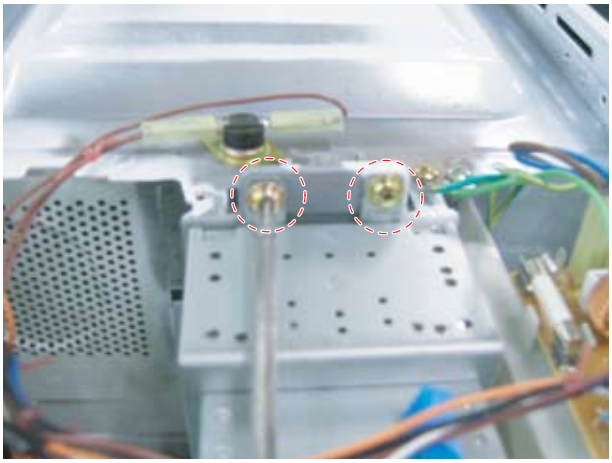
Item	Description	Code No.	Q'ty
	Coupler	DE67-00140A	1
	Assy-Guide Roller	DE97-00193B	1
	Tray-cooking	DE74-20102B	1
	Assy-Wire Rack	DE74-70071D	1

3-1 Disassembly of Magnetron, Motor Assembly and Lamp

Remove the magnetron including the shield case, permanent magnet, choke coils and capacitors (all of which are contained in one assembly)

Parts	Explanation Photo	Explanation
Magnetron, Motor Assembly and Lamp		**1.** Disconnect all lead wires from the magnetron and lamp.
		**2.** Remove a screw securing air cover.
		**3.** Remove the air cover.

3-1 Disassembly of Magnetron, Motor Assembly and Lamp

Parts	Explaination Photo	Explaination
Magnetron, Motor Assembly and Lamp		**4.** Remove screws securing the magnetron to the wave guide.
		5. Take out the magnetron very carefully.
		6. Remove two screws from the back panel. **7.** Take out the fan motor.

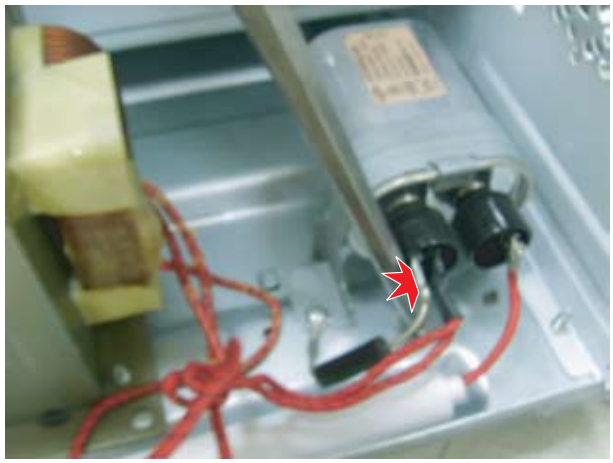
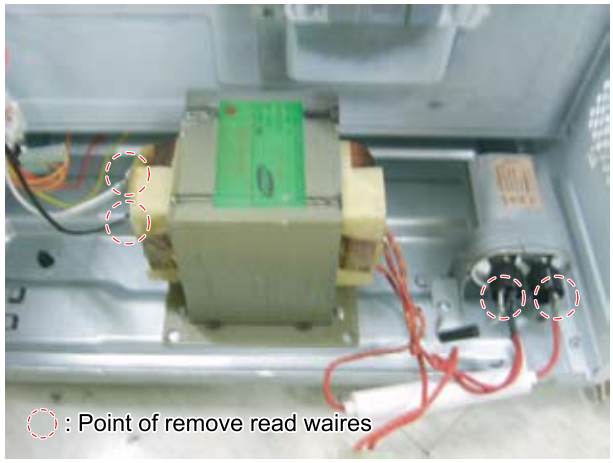
3-1 Disassembly of Magnetron, Motor Assembly and Lamp

Parts	Explaination Photo	Explaination
Magnetron, Motor Assembly and Lamp		**8.** Remove the oven lamp from hole of air cover.

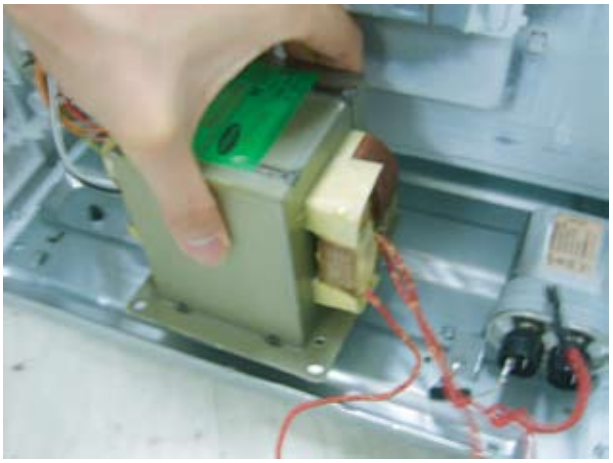
NOTE1: When removing the magnetron, make sure that its antenna does not hit any adjacent parts, or it may be damaged.

NOTE2: When replacing the magnetron, be sure to remount the magnetron gasket in the correct position and make sure the gasket is in good condition.

3-2 Replacement of High Voltage Trancefomer

Parts	Explaination Photo	Explaination
High Voltage Transformer		**1.** Discharge the high voltage capacitor.
		**2.** Disconnect all the leads.

3-2 Replacement of High Voltage Trancefomer

Parts	Explaination Photo	Explaination
High Voltage Transformer		**3.** Remove the mounting bolts.
		**4.** Replace the High Voltage Transformer **5.** After replace, reconnect the leads correctly and firmly.

⚠ PRECAUTION

Servicemen should remove their watches whenever working close to or replacing the magnetron.

⚠ PRECAUTION

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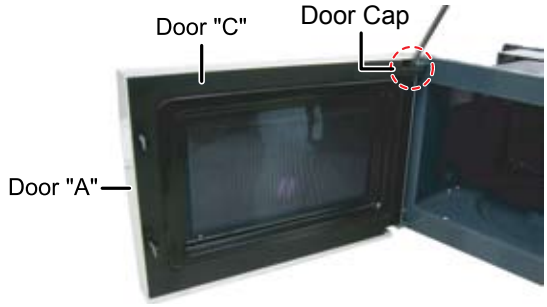
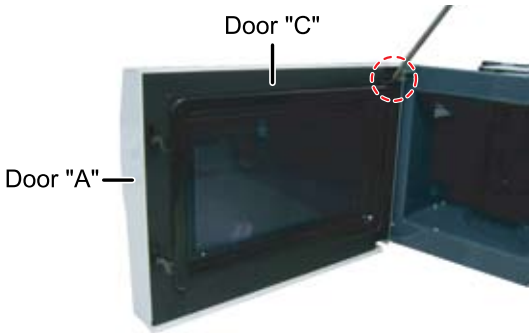
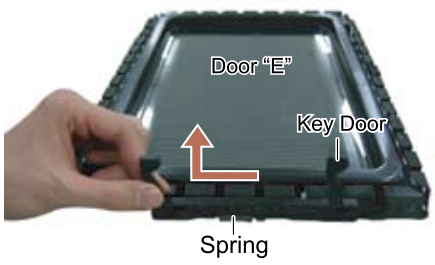
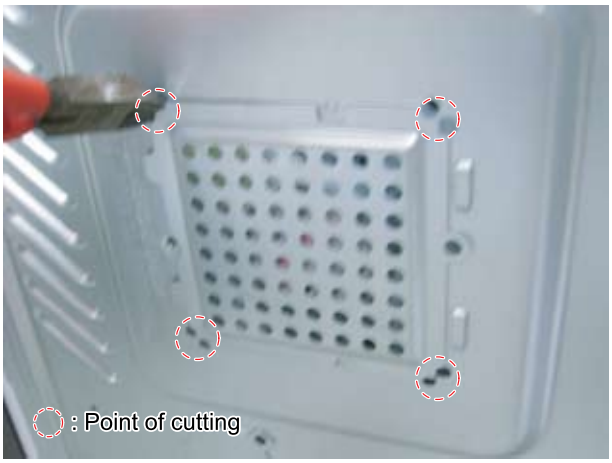
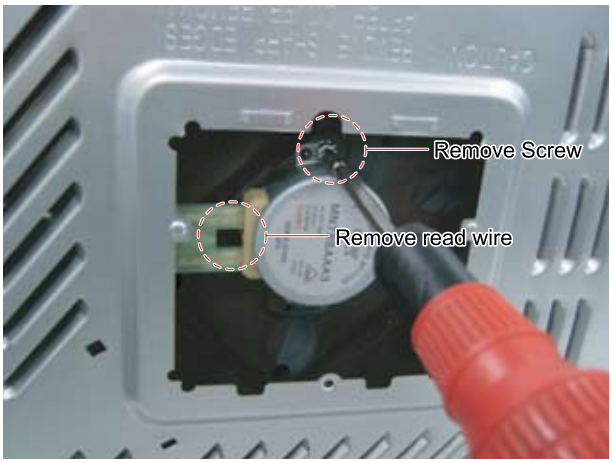
DO NOT measure the voltage in the high voltage circuit including filament voltage of magnetron.

3-3 Replacement of Door Assembly

Parts	Disassembly Photo	Explanation
Removal of Door Cap		Insert flat screwdriver into the gap between Door “A” and Door Cap to remove Door Cap.
Removal of Door “C” and Door Assembly		Insert flat screwdriver into gap between Door “A” and Door “C” to remove Door “C” because it is fragile. Then remove door assembly.
Removal of Door Assembly		Lift up the Door Assembly from Cavity.
Removal of Door “E”		Following the procedure as shown in the figure, insert and bend a thin metal plate between Door “E” and Door “A” until you hear the ‘tick’ sound. • Insertion depth of the thin metal plate should be 0.5mm or less.
Removal of Key Door & Spring		Remove pin hinge from Door “E” Detach spring from Door “E” and key door.

3-4 Replacement of Drive Motor

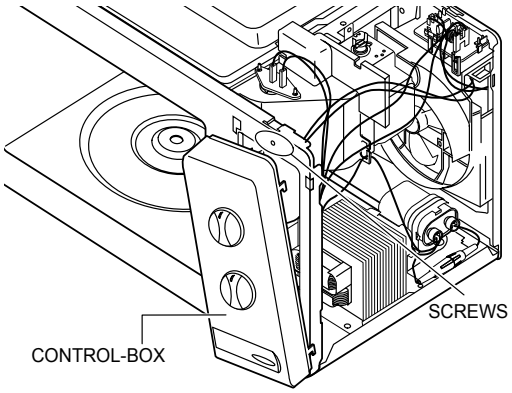
<table>
<tr><th>Parts</th><th>Explanation Photo</th><th>Explanation</th></tr>
<tr><td rowspan="2">Drive Motor</td><td> 
</td><td>1. Take out the glass tray, guide roller from oven cavity, disconnect power.
2. Remove turn table motor cover from case bottom.

CAUTION : Remove sharp edge after cover removal.</td></tr>
<tr><td> 
</td><td>3. Disconnect leads from motor.
4. Remove the screws securing motor to bottom of over cavity.</td></tr>
<tr><td rowspan="2">Drive Motor</td><td> </td><td>6. Lift out the motor.
5. When replacing the motor, be sure to remount it in the correct position.

NOTE : The shaft of motor should fit tip coupler.</td></tr>
<tr><td>COVER FIXING SCREW :
MATCHINE SCREW(6006-001170)</td><td>6. When reassemble a drive motor cover. give a turn in a 180° and fix with a screw.

NOTE : Bring the spare screw from service center.</td></tr>
</table>

3-5 Replacement of Control Circuit Board

Parts	Explaination Photo	Explaination
Removal of Control Box Assembly		1. Disconnect the connectors from the control box assembly. 2. Remove screws securing the control box assembly. 3. Remove the knobs of the control box Ass'y. 4. Remove the screw securing the timer.

4. Troubleshooting

4-1 Error Code Numbering Rule

1. ERROR CODE NUMBERING RULE is applied to a microwave oven and an oven.(CMO, OTR, Grill, Convection, Commercial etc.)
2. All sensors and devices have their own number. ex) Gas Sensor = 1, Temp. Sensor = 2, ...
3. Of each device, No.1 and No.2 refer to “Open Error” (not sensed) and “Short Error”, respectively.
4. This numbering rule has been applied to models to have been developed since January, 1, 2005. (But, GE or Customize model are excluded.)

E	-	1	1

DEVICE	ERROR CASE
0- Others	1- Open
1- Gas Sensor	2- Short
2- Temp. Sensor	•
3- Weight Sensor	•
4- Easy/PH Sensor	•
5- EEPROM	
•	
•	
•	

4-2 Error Code List

Gas Sensor

Error Code	Gas Sensor Error Case (E-1X)	Solution	Page
E-11	Open	Check Sensor part ,connection of sensor housing and PCB’s connector.	19 Page
E-12	Short		20 Page
E-13	T1 Max Time Error		21 Page
E-14	Dry Up / No Load	Insert food and restart.	

Temp Sensor

Error Code	Temp. Sensor Error Case (E-2X)	Solution	Page
E-21	Open	Check sensor part and connection of sensor housing and PCB’s connector.	19 Page
E-22	Short		20 Page
E-23	T1 Max Time Error (Preheating not completed)	Check heater.	30 Page
E-24	Over temperature error		32 Page
E-25	In case abnormal temperature is sensed at Micro Cook	Cool down set and restart.	33 Page
E-26	In case the temperature is not over the fixed AD in first 3 minutes after cooking by heater starts.	Check sensor and heater.	30 Page

Eeprom Error

Error Code	EEPROM Error Case (E-5X)	Solution	Page
E-51	Open (Sense Failure)	Replace EEPROM and restart.	26 Page
E-53	Read/Write Error		
E-54	Zero not to be set		

4. Troubleshooting

Weight Sensor

Error Code	Gas Sensor Error Case (E-1X)	Solution	Page
E-31	Open (When value of HEX is above “FF” for 5 seconds)	Check Sensor.	19 Page
E-32	Short		20 Page
E-33	In case the initial value of HEX is under “14” for 30 seconds while a weight sensor in operation.		23 Page
E-34	In case the initial value of K calculated by a weight sensor is above and under “±28” as value of HEX.		
E-35	In case the value of A is “-” as a weight sensor calculates.		
E-36	In case the door opens during sensor cooking.	Cancel the present mode and restart from the begining.	24 Page

Easy/Ph Sensor

Error Code	Easy/PH Sensor Error Case (E4)	Solution	Page
E-41	Open	Check Sensor.	19 Page
E-42	Short		20 Page
E-43	T1 Max Time Error		21 Page
E-44	Dry Up	Insert food and restart.	21 Page
E-45	Cooling Error (3minutes)	Remove moisture from sensor and restart.	25 Page
E-46	Primary Open Error(3minutes)	Check Sensor.	19 Page
E-47	The door opens during cooking	Cancel the present mode and restart from the begining.	24 Page

Humidity Sensor

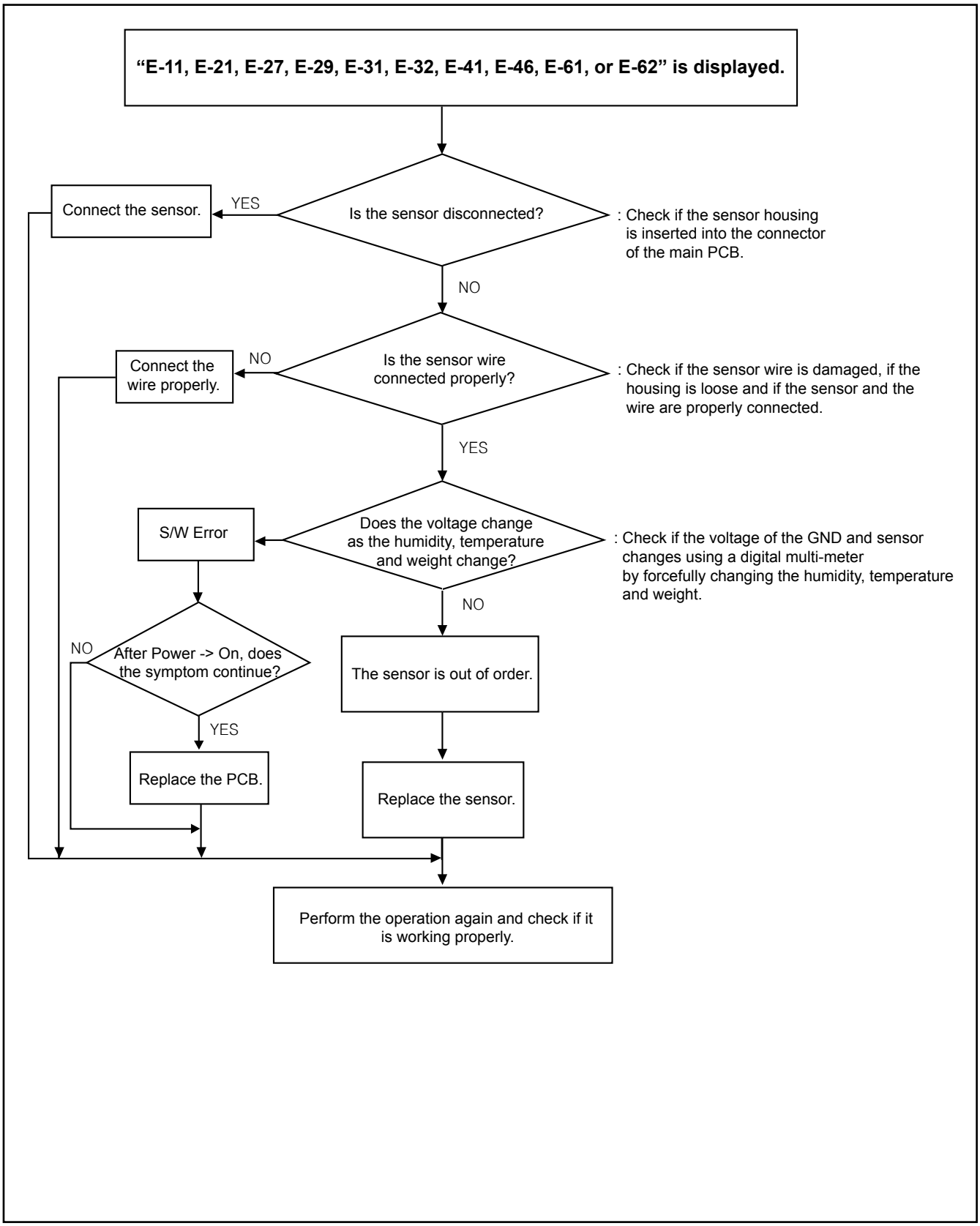
Error Code	Humidity Sensor Error Case (E-6X)	Solution	Page
E-61	Open	Check Sensor.	19 Page
E-62	Short		20 Page
E-63	T1 Max Time Error		21 Page

Others

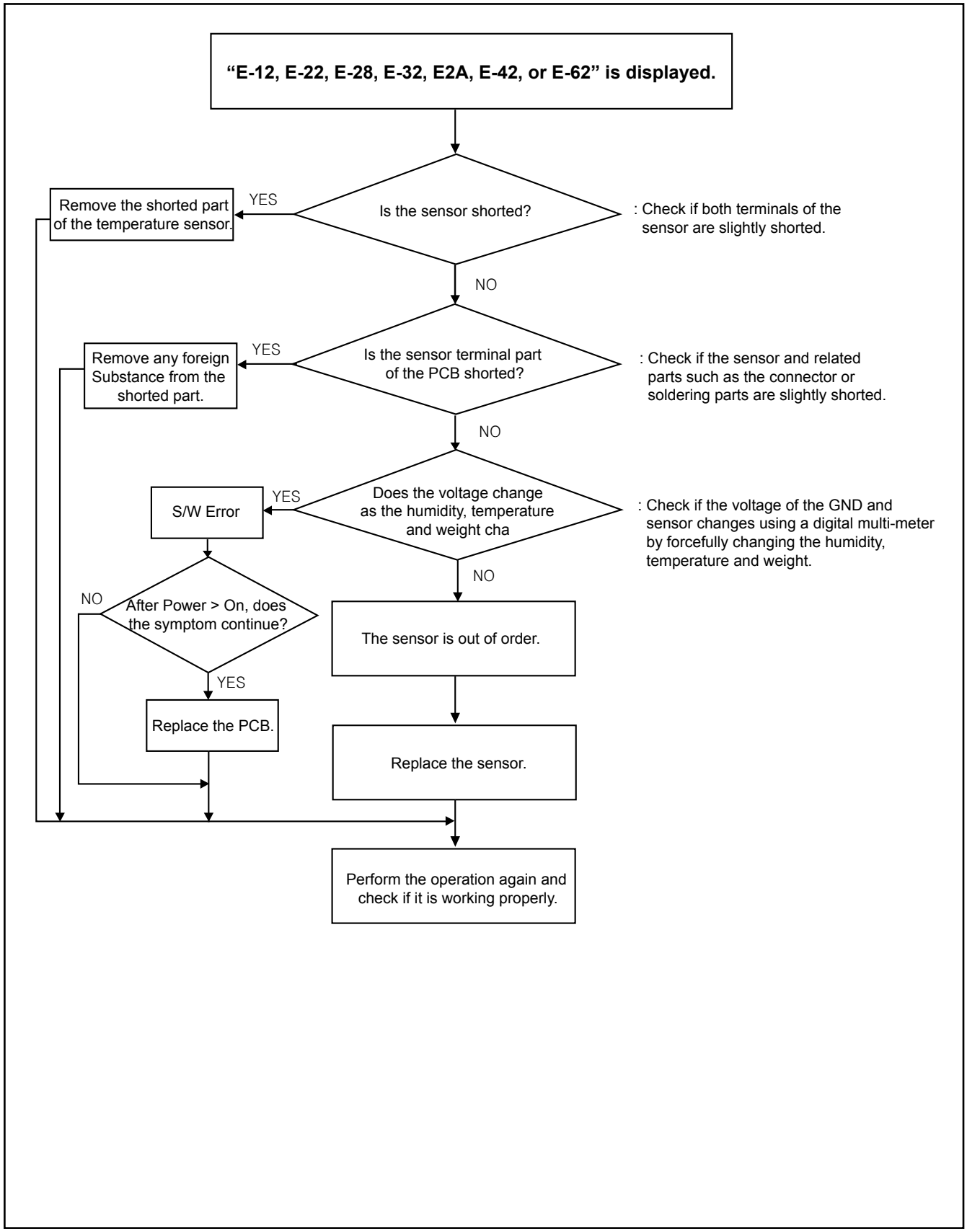
Error Code	Others (E-0X, Letter)	Solution	Page
-SE-	Key Short Error (10 seconds)	Turn off set and restart.	22 Page
E-02	Cooking Time Setting Over Error (MWO)	Check each mode’s setting time.	31 Page
E-03	Cooking Time Setting Over Error (Grill)		
E-04	Cooking Time Setting Over Error (Convection)		
E-05	Cooking Time Setting Over Error (Combination)		
E-06	It fails to sense that the swing heater has stopped for 20 seconds during cooking.	Check Swing heater’s motor and connector.	34 Page
E-08	In case function of MWO starts with spit inserted into cavity inside.	Restart after remove spit.	30 Page
E-09	In case the damper is not set to be positioned for 2 minutes.	Check damper and connector.	32 Page

4-3 Electrical Malfunction

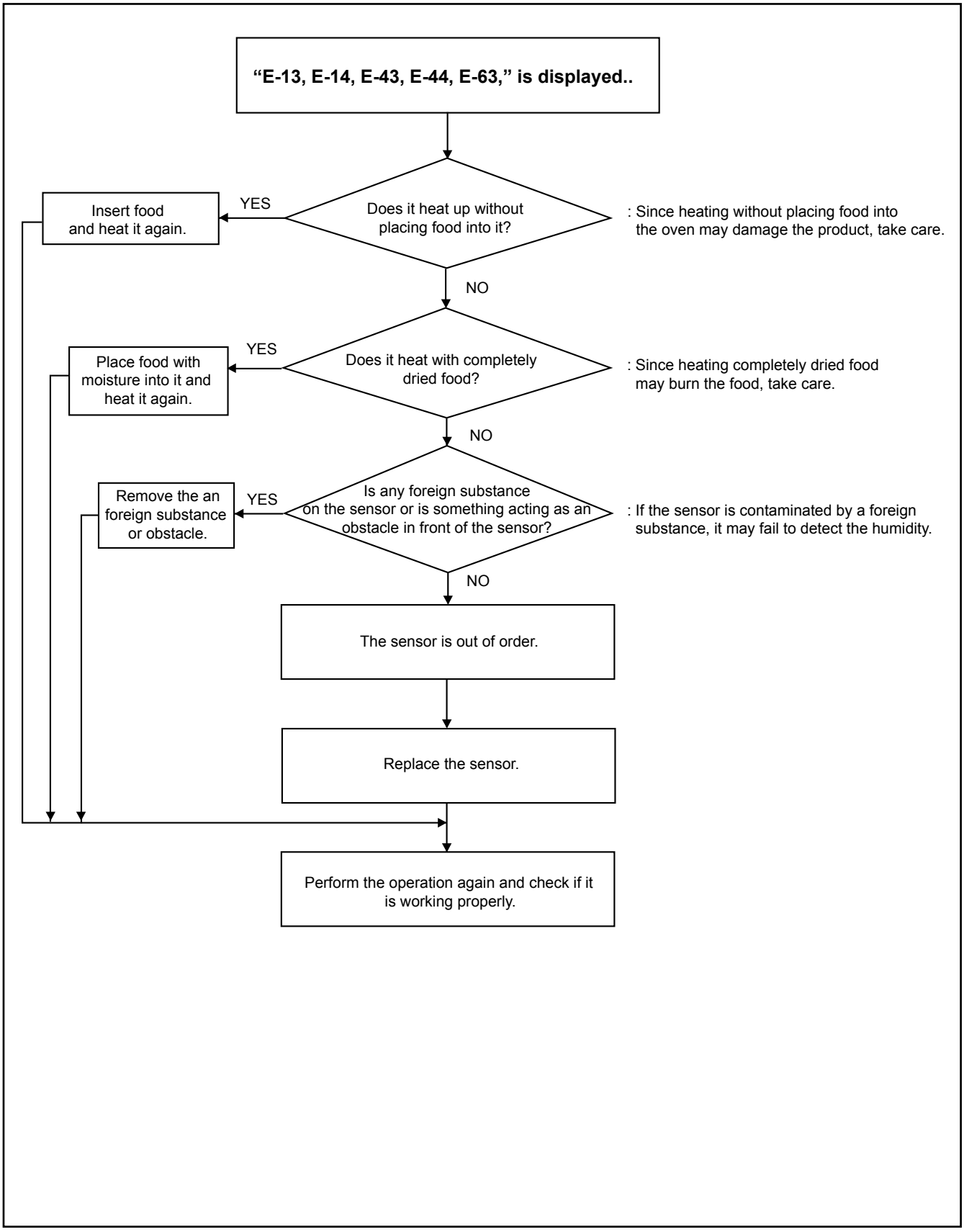
4-3-1 Sensor Open Error


"E-11, E-21, E-27, E-29, E-31, E-32, E-41, E-46, E-61, or E-62" is displayed.
Is the sensor disconnected?
YES
Connect the sensor.
: Check if the sensor housing is inserted into the connector of the main PCB.
NO
Is the sensor wire connected properly?
NO
Connect the wire properly.
: Check if the sensor wire is damaged, if the housing is loose and if the sensor and the wire are properly connected.
YES
Does the voltage change as the humidity, temperature and weight change?
S/W Error
: Check if the voltage of the GND and sensor changes using a digital multi-meter by forcefully changing the humidity, temperature and weight.
NO
After Power -> On, does the symptom continue?
NO
YES
The sensor is out of order.
Replace the PCB.
Replace the sensor.
Perform the operation again and check if it is working properly.

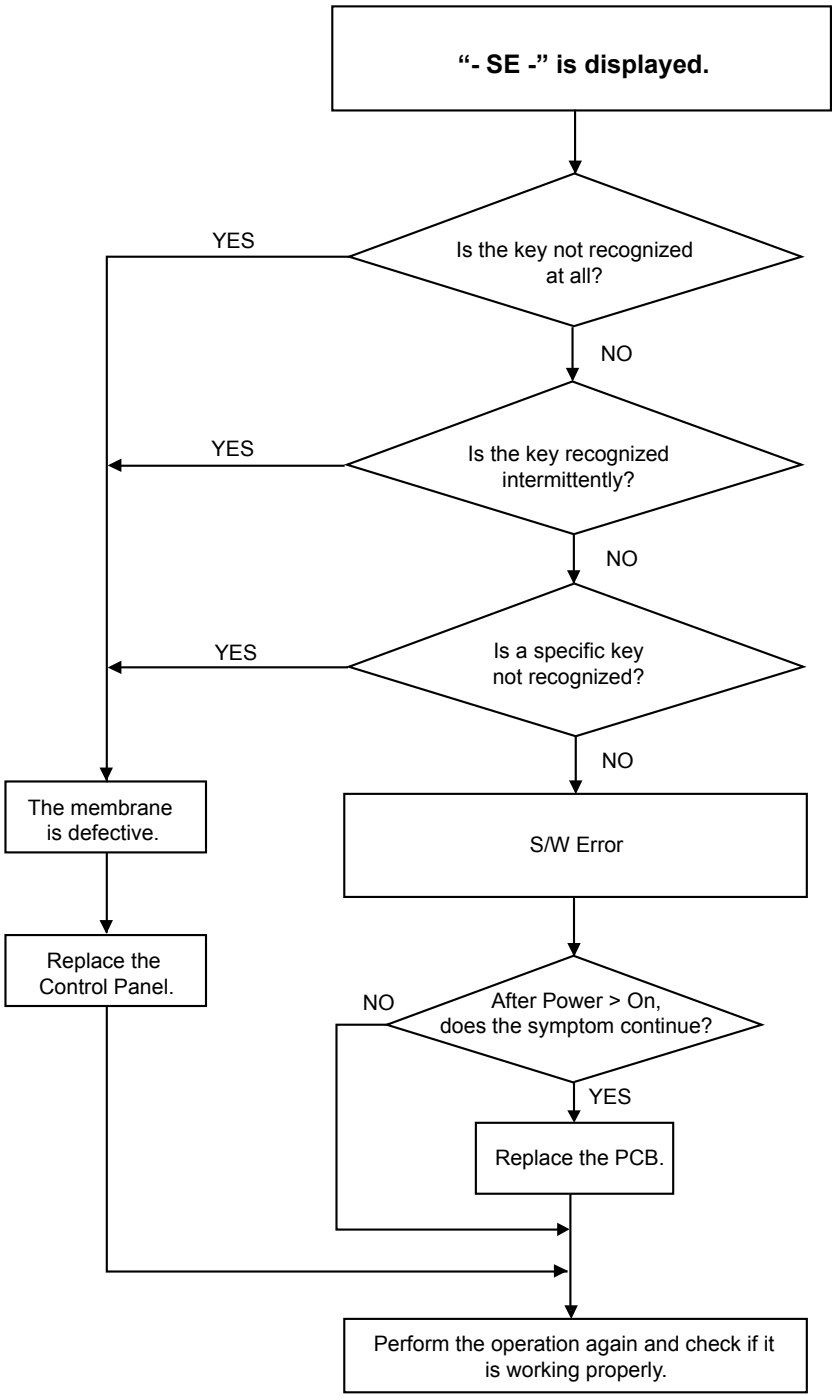
4-3-2 Sensor Short Error


"E-12, E-22, E-28, E-32, E2A, E-42, or E-62" is displayed.
Is the sensor shorted?
YES
Remove the shorted part of the temperature sensor.
: Check if both terminals of the sensor are slightly shorted.
NO
Is the sensor terminal part of the PCB shorted?
YES
Remove any foreign Substance from the shorted part.
: Check if the sensor and related parts such as the connector or soldering parts are slightly shorted.
NO
Does the voltage change as the humidity, temperature and weight cha
YES
S/W Error
: Check if the voltage of the GND and sensor changes using a digital multi-meter by forcefully changing the humidity, temperature and weight.
NO
After Power > On, does the symptom continue?
NO
YES
Replace the PCB.
The sensor is out of order.
Replace the sensor.
Perform the operation again and check if it is working properly.

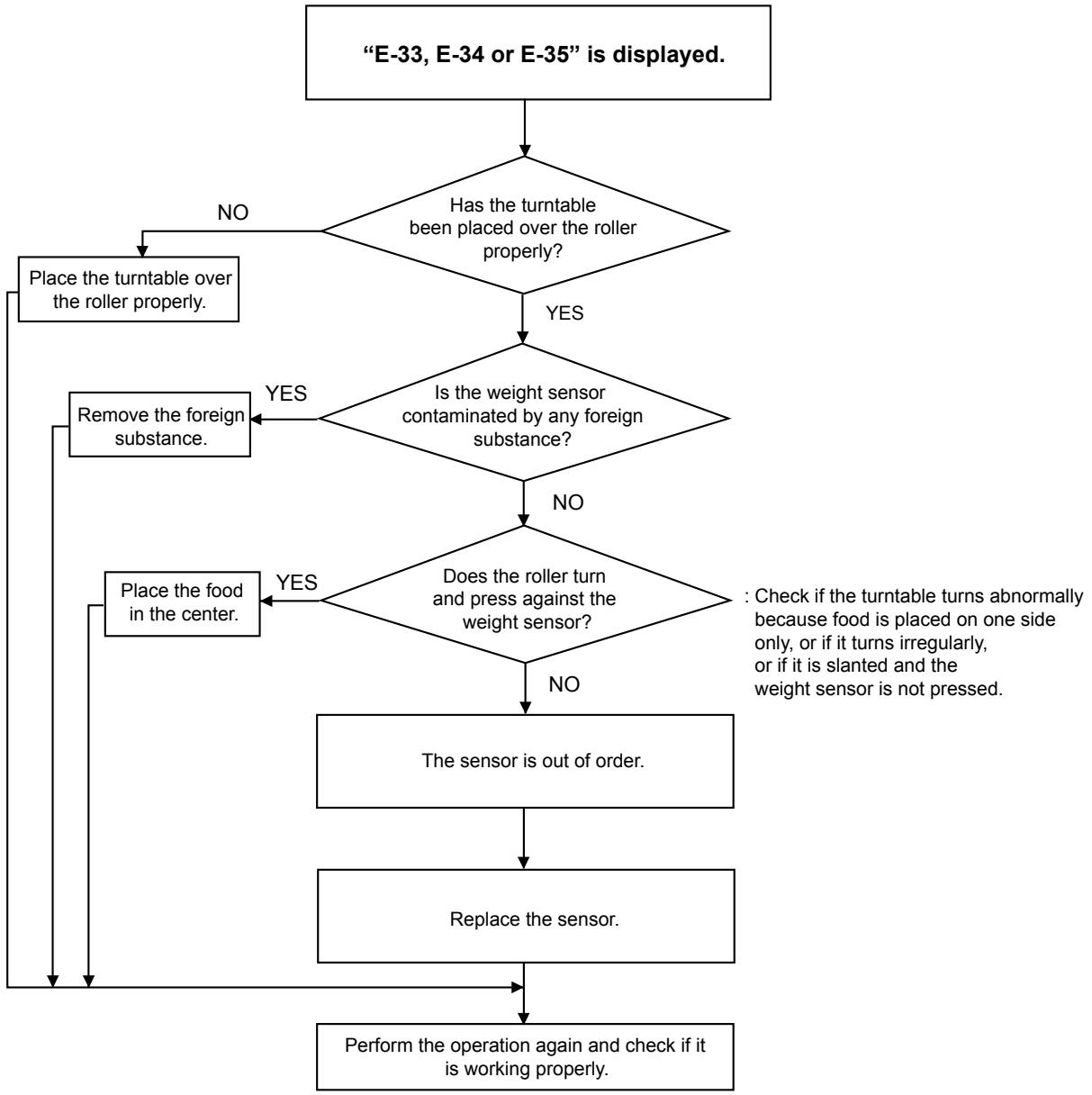
4-3-3 Sensor Max Time Error


"E-13, E-14, E-43, E-44, E-63," is displayed..
Does it heat up without placing food into it?
YES
Insert food and heat it again.
: Since heating without placing food into the oven may damage the product, take care.
NO
Does it heat with completely dried food?
YES
Place food with moisture into it and heat it again.
: Since heating completely dried food may burn the food, take care.
NO
Is any foreign substance on the sensor or is something acting as an obstacle in front of the sensor?
YES
Remove the an foreign substance or obstacle.
: If the sensor is contaminated by a foreign substance, it may fail to detect the humidity.
NO
The sensor is out of order.
Replace the sensor.
Perform the operation again and check if it is working properly.

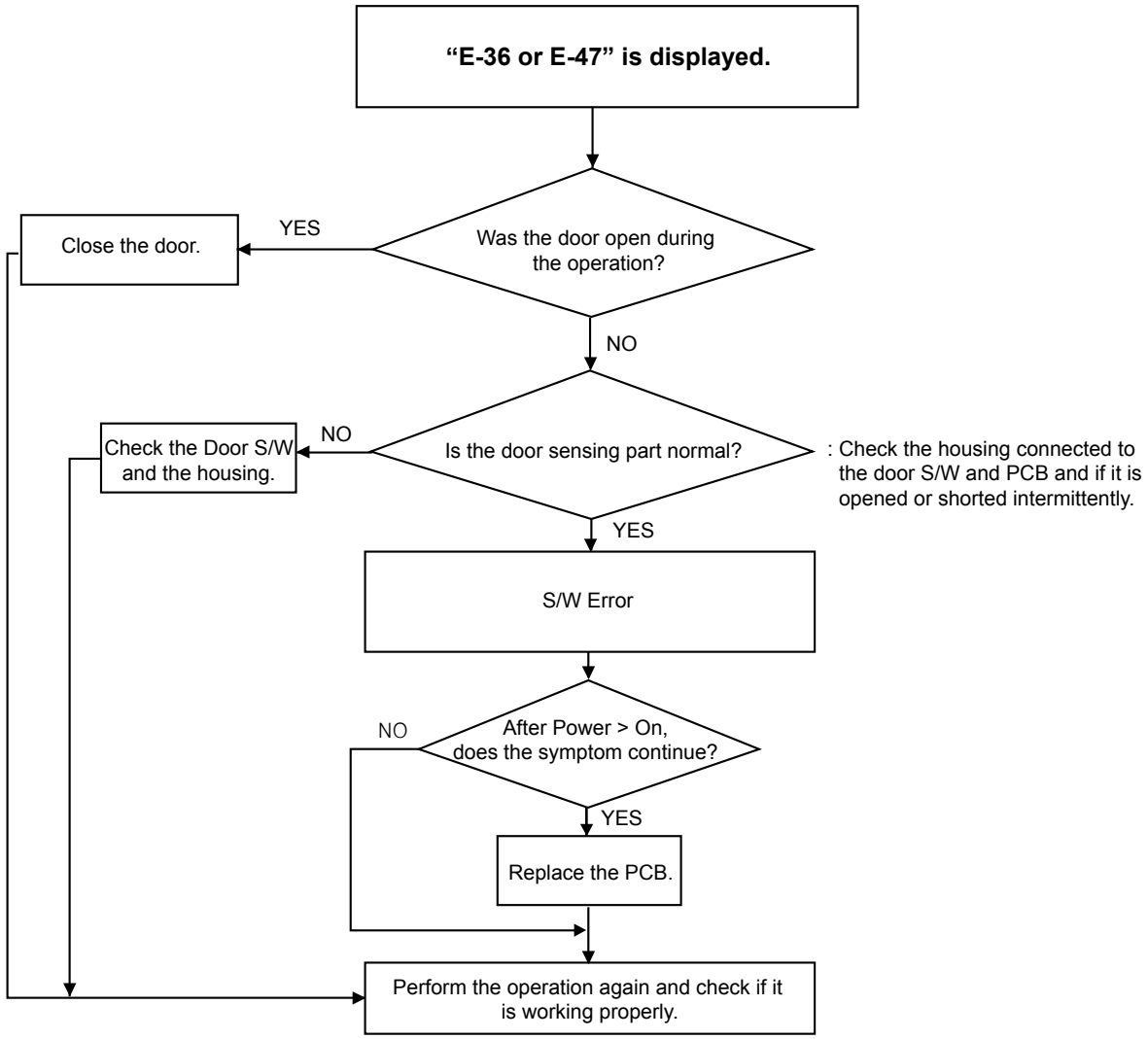
4-3-4 Key Short Error



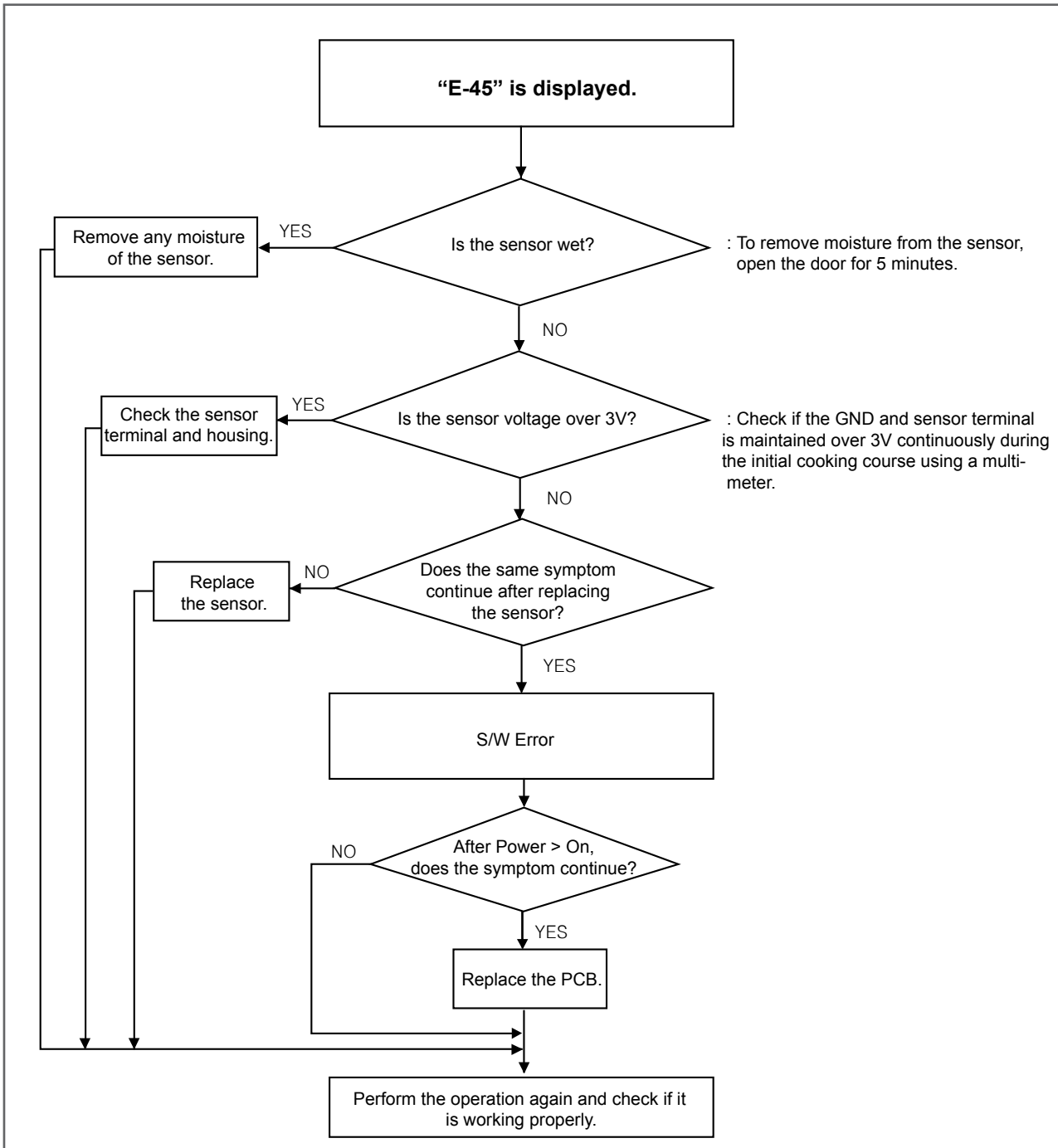
4-3-5 Weight Sensor Error


"E-33, E-34 or E-35" is displayed.
Has the turntable been placed over the roller properly?
NO
Place the turntable over the roller properly.
YES
Is the weight sensor contaminated by any foreign substance?
YES
Remove the foreign substance.
NO
Does the roller turn and press against the weight sensor?
YES
Place the food in the center.
NO
: Check if the turntable turns abnormally because food is placed on one side only, or if it turns irregularly, or if it is slanted and the weight sensor is not pressed.
The sensor is out of order.
Replace the sensor.
Perform the operation again and check if it is working properly.

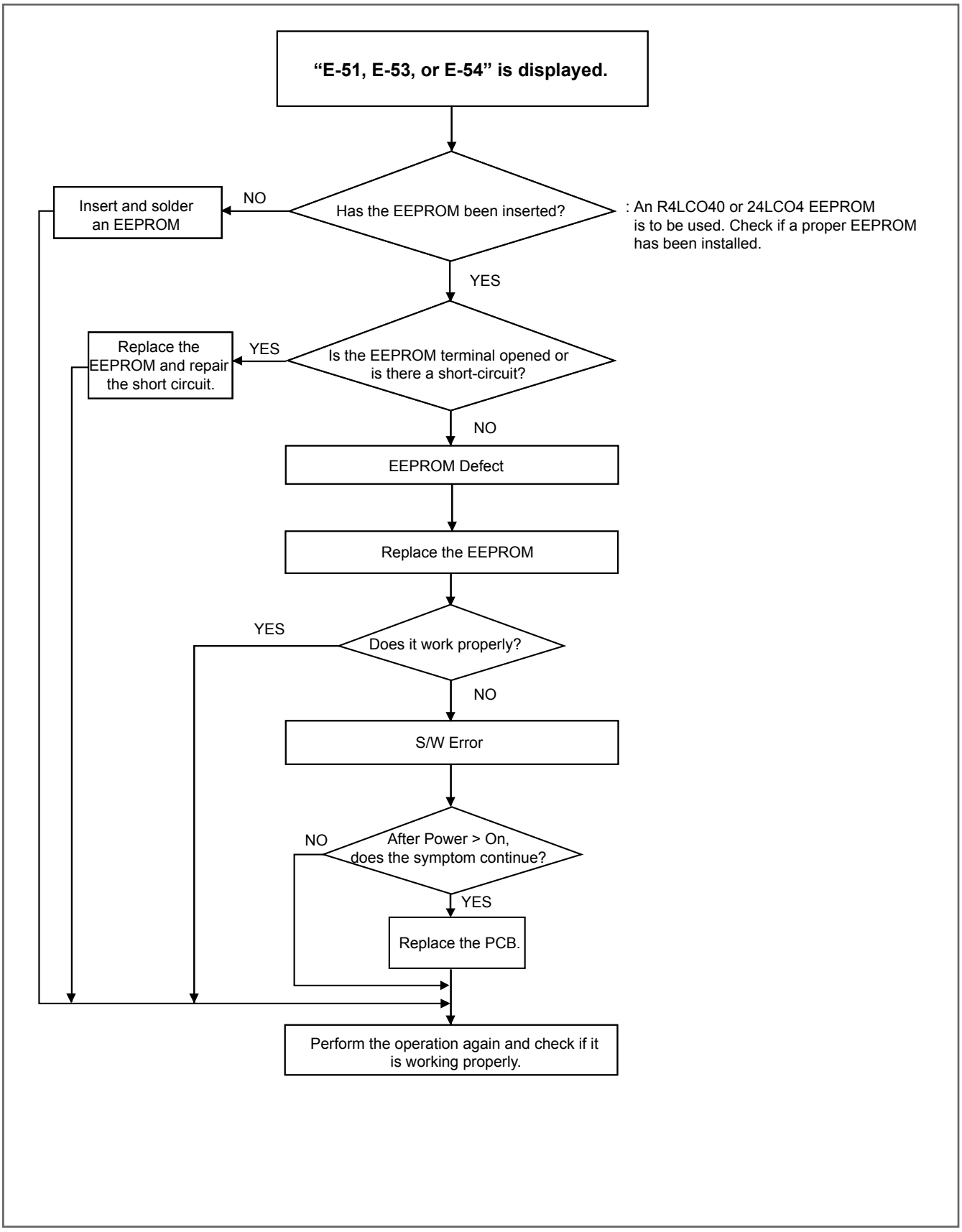
4-3-6 Weight Sensor Error


"E-36 or E-47" is displayed.
Was the door open during the operation?
YES
Close the door.
NO
Is the door sensing part normal?
NO
Check the Door S/W and the housing.
: Check the housing connected to the door S/W and PCB and if it is opened or shorted intermittently.
YES
S/W Error
After Power > On, does the symptom continue?
NO
YES
Replace the PCB.
Perform the operation again and check if it is working properly.

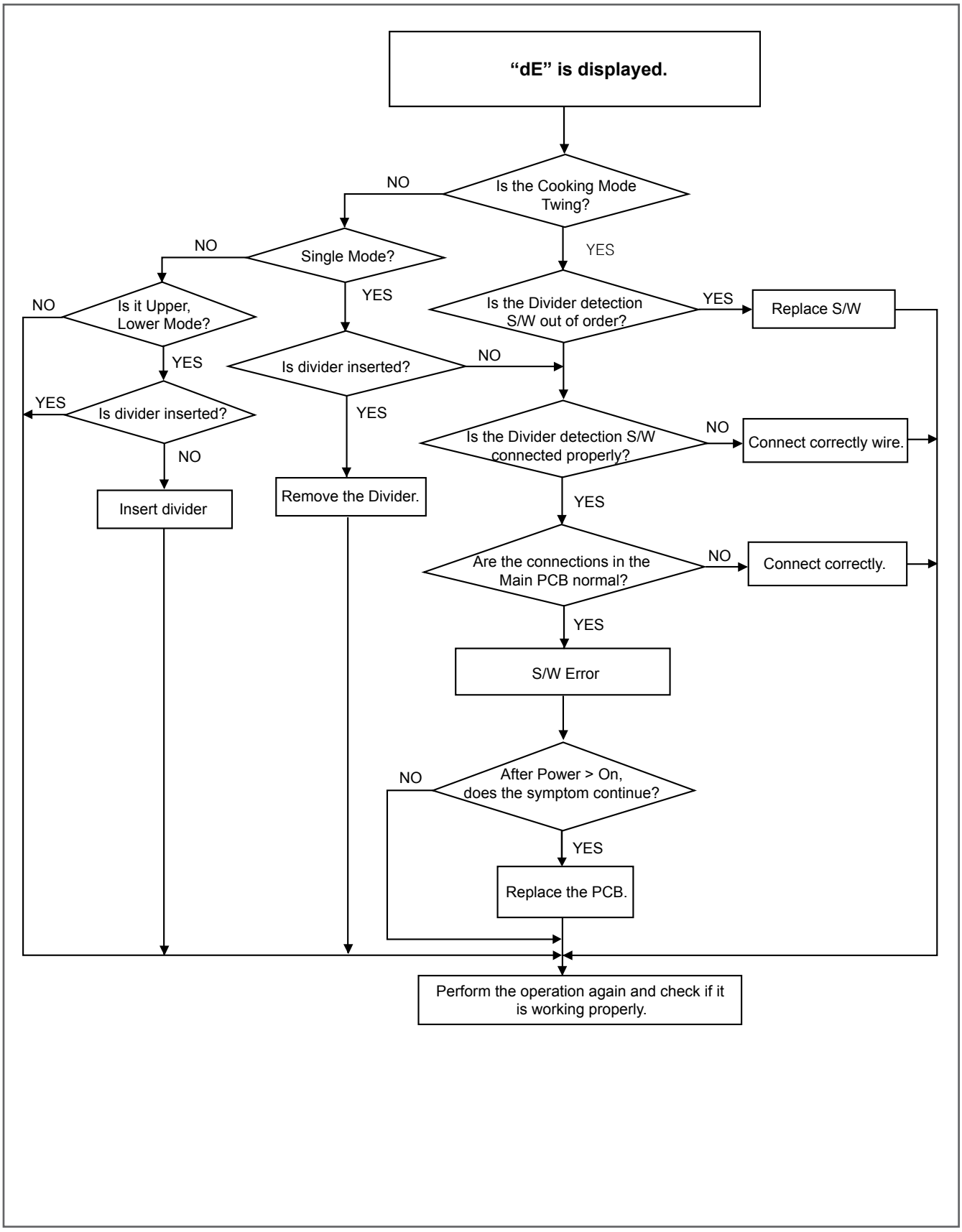
4-3-7 Cooling Error


"E-45" is displayed.
Is the sensor wet?
YES
Remove any moisture of the sensor.
: To remove moisture from the sensor, open the door for 5 minutes.
NO
Is the sensor voltage over 3V?
YES
Check the sensor terminal and housing.
: Check if the GND and sensor terminal is maintained over 3V continuously during the initial cooking course using a multi-meter.
NO
Does the same symptom continue after replacing the sensor?
NO
Replace the sensor.
YES
S/W Error
After Power > On, does the symptom continue?
NO
YES
Replace the PCB.
Perform the operation again and check if it is working properly.

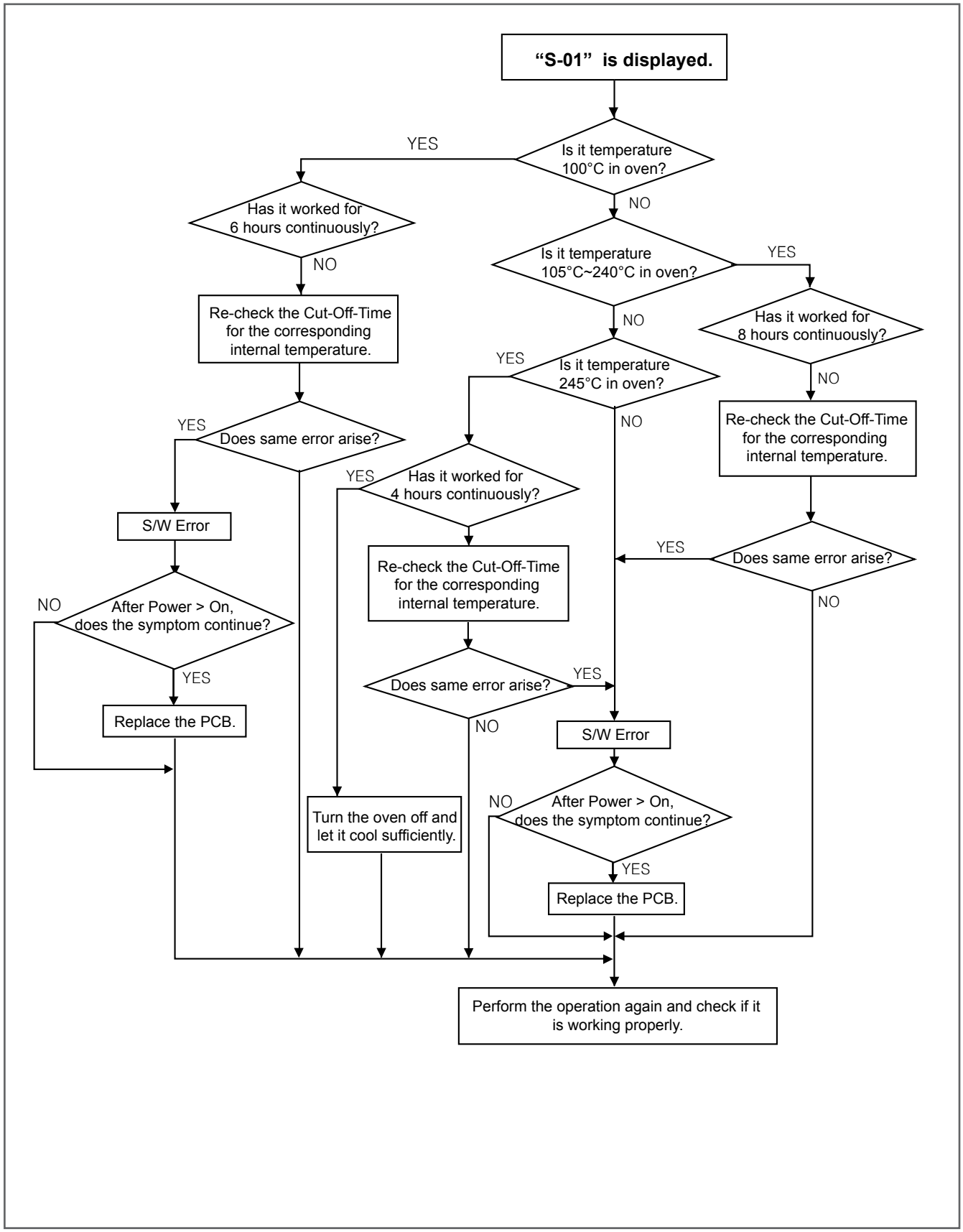
4-3-8 EEPROM Error


"E-51, E-53, or E-54" is displayed.
Has the EEPROM been inserted?
NO
Insert and solder an EEPROM
: An R4LCO40 or 24LCO4 EEPROM is to be used. Check if a proper EEPROM has been installed.
YES
Is the EEPROM terminal opened or is there a short-circuit?
YES
Replace the EEPROM and repair the short circuit.
NO
EEPROM Defect
Replace the EEPROM
Does it work properly?
YES
NO
S/W Error
After Power > On, does the symptom continue?
NO
YES
Replace the PCB.
Perform the operation again and check if it is working properly.

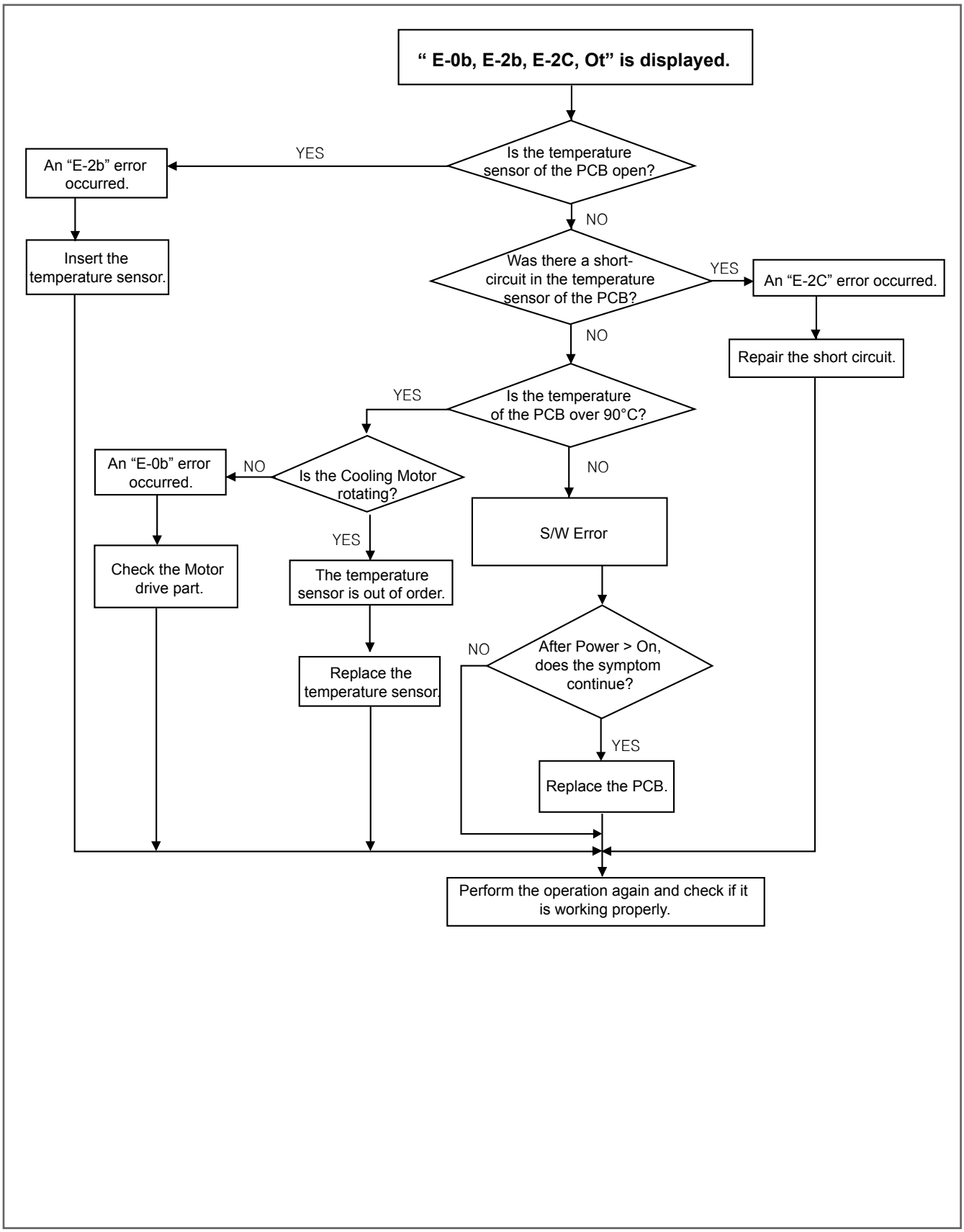
4-3-9 Divider Missing Error



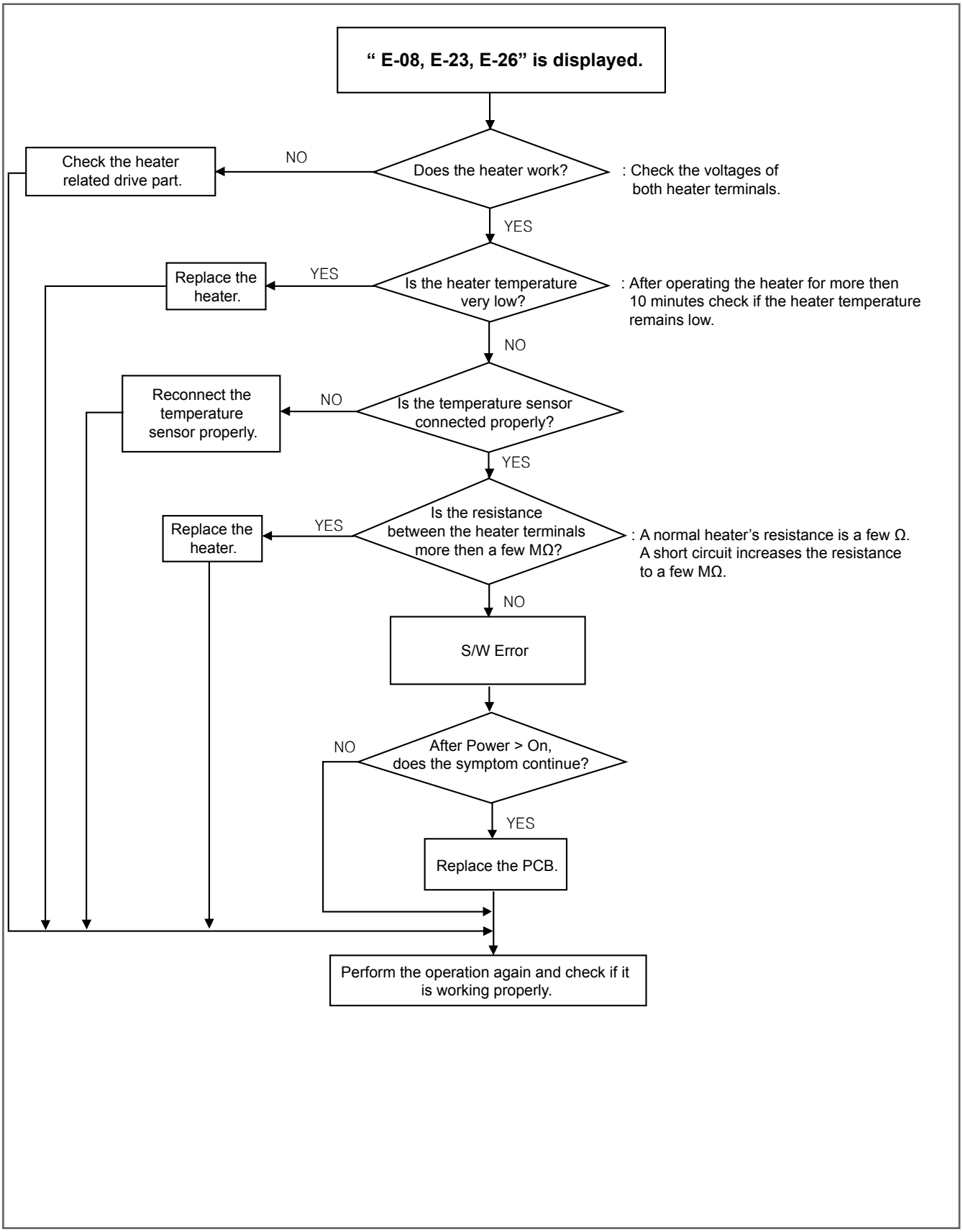
4-3-10 Over Time Error



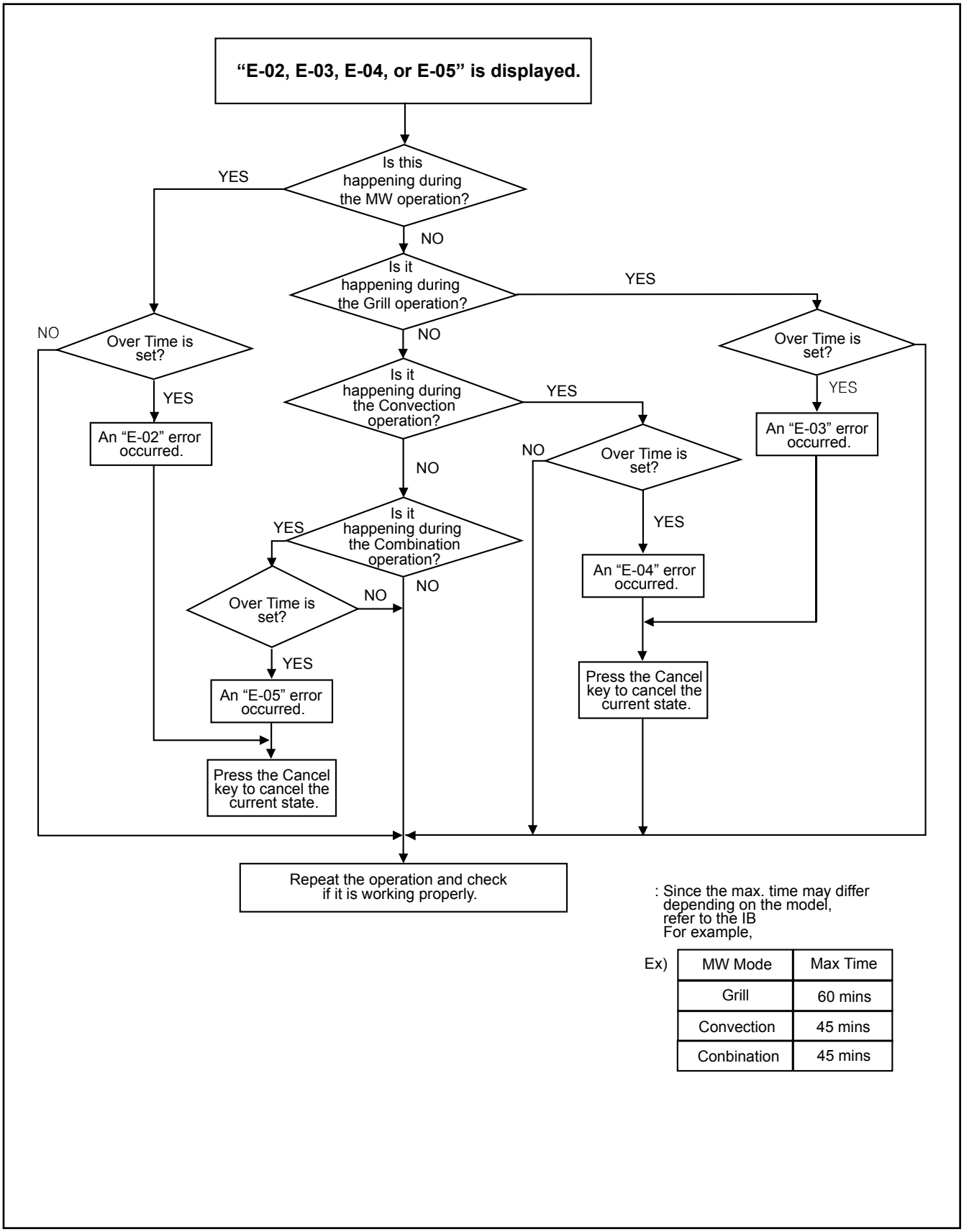
4-3-11 Over Time Error


" E-0b, E-2b, E-2C, Ot" is displayed.
Is the temperature sensor of the PCB open?
YES
An "E-2b" error occurred.
Insert the temperature sensor.
NO
Was there a short-circuit in the temperature sensor of the PCB?
YES
An "E-2C" error occurred.
Repair the short circuit.
NO
Is the temperature of the PCB over 90°C?
YES
NO
Is the Cooling Motor rotating?
NO
An "E-0b" error occurred.
Check the Motor drive part.
YES
The temperature sensor is out of order.
Replace the temperature sensor.
S/W Error
After Power > On, does the symptom continue?
NO
YES
Replace the PCB.
Perform the operation again and check if it is working properly.

4-3-12 Preheating Error


“ E-08, E-23, E-26” is displayed.
Does the heater work?
NO
Check the heater related drive part.
: Check the voltages of both heater terminals.
YES
Is the heater temperature very low?
YES
Replace the heater.
: After operating the heater for more then 10 minutes check if the heater temperature remains low.
NO
Is the temperature sensor connected properly?
NO
Reconnect the temperature sensor properly.
YES
Is the resistance between the heater terminals more then a few MΩ?
YES
Replace the heater.
: A normal heater’s resistance is a few Ω. A short circuit increases the resistance to a few MΩ.
NO
S/W Error
After Power > On, does the symptom continue?
NO
YES
Replace the PCB.
Perform the operation again and check if it is working properly.

4-3-13 Cooking Time Over Selection Error

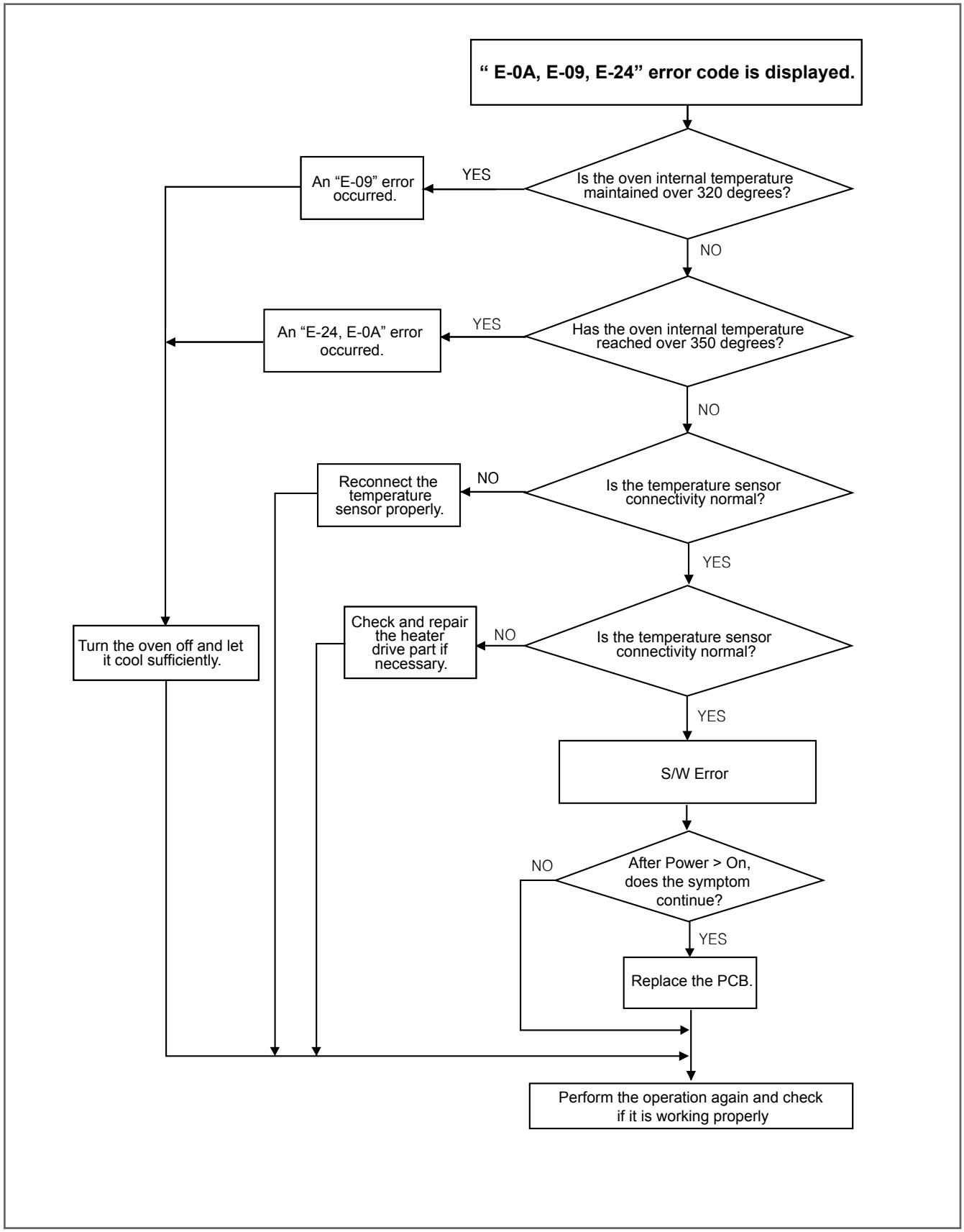


: Since the max. time may differ depending on the model, refer to the IB
For example,

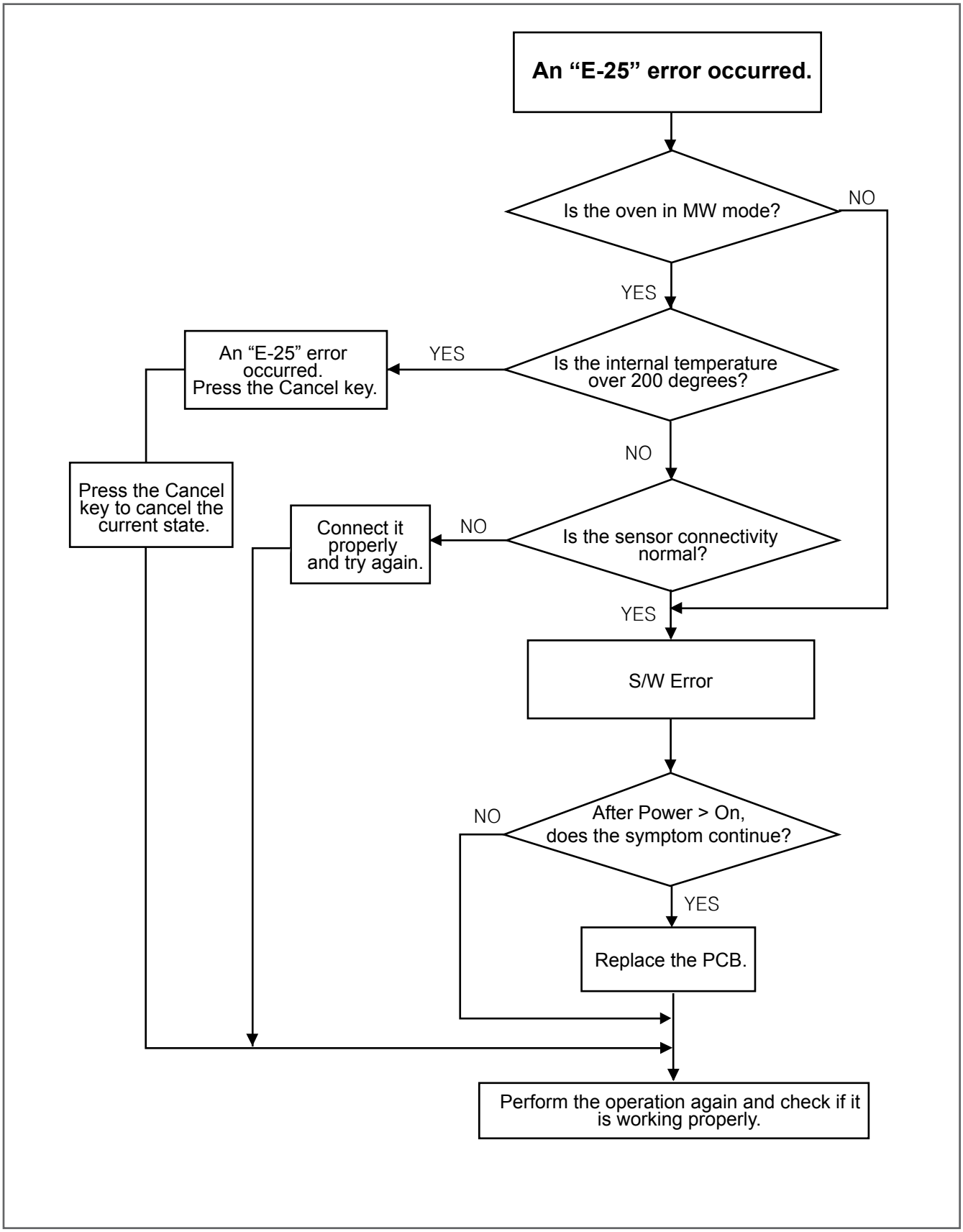
Ex)

MW Mode	Max Time
Grill	60 mins
Convection	45 mins
Conbination	45 mins

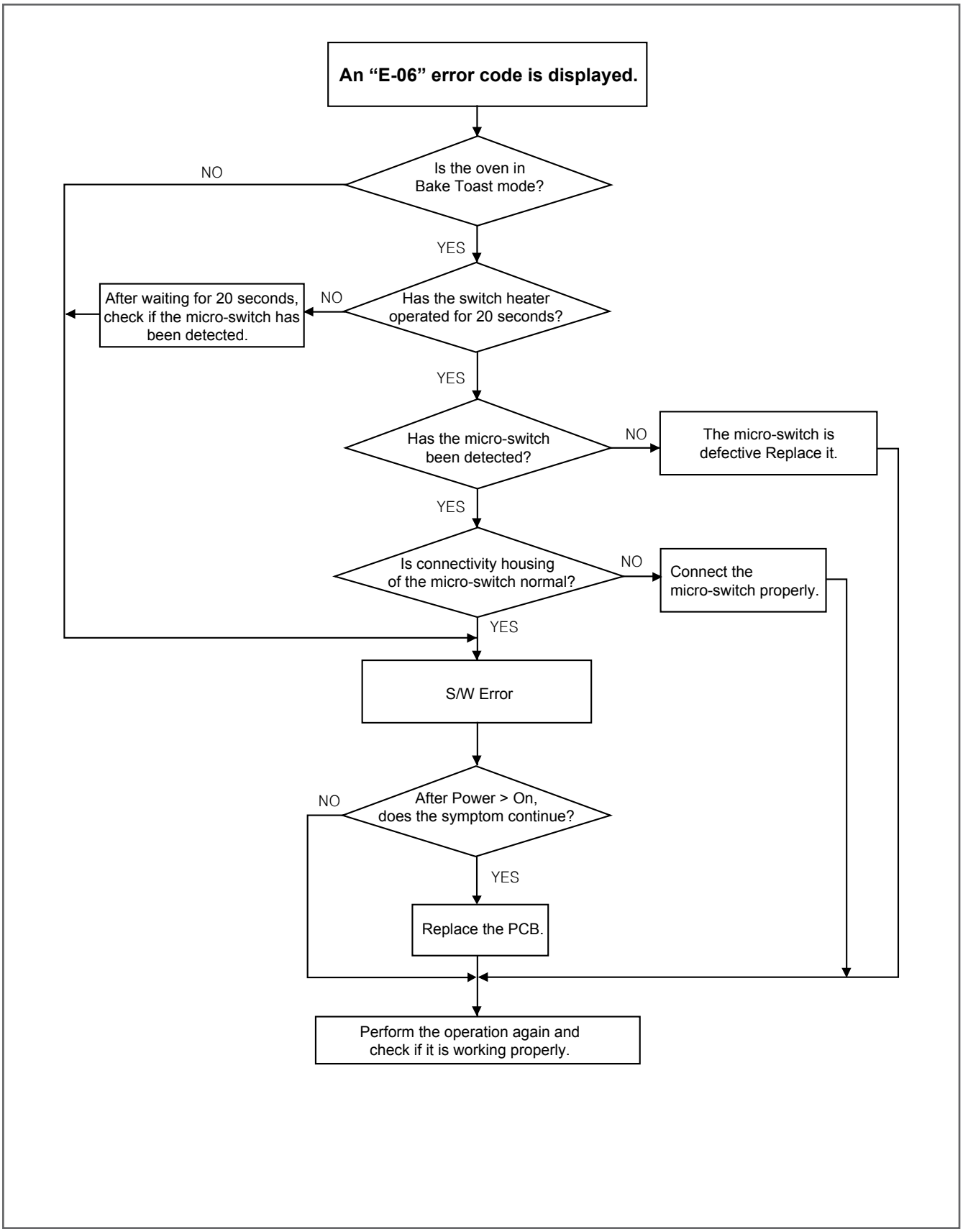
4-3-14 Internal Oven Temperature Abnormal Error


“ E-0A, E-09, E-24” error code is displayed.
Is the oven internal temperature maintained over 320 degrees?
YES
An “E-09” error occurred.
NO
Has the oven internal temperature reached over 350 degrees?
YES
An “E-24, E-0A” error occurred.
NO
Is the temperature sensor connectivity normal?
NO
Reconnect the temperature sensor properly.
YES
Is the temperature sensor connectivity normal?
NO
Check and repair the heater drive part if necessary.
YES
S/W Error
After Power > On, does the symptom continue?
NO
YES
Replace the PCB.
Turn the oven off and let it cool sufficiently.
Perform the operation again and check if it is working properly

4-3-15 Swing Heater Detection Error


An “E-25” error occurred.
Is the oven in MW mode?
NO
YES
Is the internal temperature over 200 degrees?
YES
An “E-25” error occurred. Press the Cancel key.
NO
Is the sensor connectivity normal?
NO
Connect it properly and try again.
YES
Press the Cancel key to cancel the current state.
S/W Error
After Power > On, does the symptom continue?
NO
YES
Replace the PCB.
Perform the operation again and check if it is working properly.

4-3-16 Swing Heater Detection Error


An “E-06” error code is displayed.
Is the oven in Bake Toast mode?
NO
YES
Has the switch heater operated for 20 seconds?
NO
After waiting for 20 seconds, check if the micro-switch has been detected.
YES
Has the micro-switch been detected?
NO
The micro-switch is defective Replace it.
YES
Is connectivity housing of the micro-switch normal?
NO
Connect the micro-switch properly.
YES
S/W Error
After Power > On, does the symptom continue?
NO
YES
Replace the PCB.
Perform the operation again and check if it is working properly.

4-3-17 If oven malfunction

Oven does not operate.

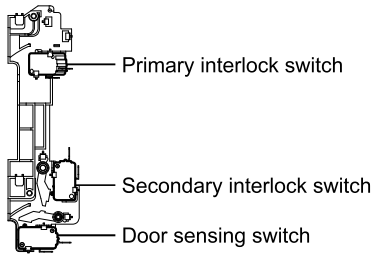
***Inspection method**

Caution
1. Be careful of high voltage circuits.
2. Discharge high voltage capacitor.

Is Fuse OK?

NO → Is Primary interlock switch normal?

NO → Make sure to inspect the power relay after replacing primary interlock switch, secondary interlock switch and door sensing switch.



< Latch switch assembly >

YES

YES → Is Power Relay normal?

NO → Replace Relay

Is the magnetron temperature switch normal?

NO → Replace switch

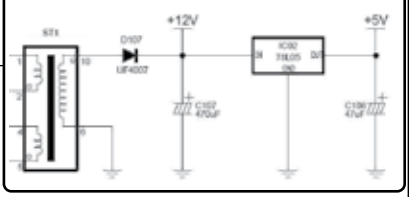
NO → Check a fan motor after replacing switch

YES

Is SMPS power supply cirduit normal?

NO → Do check power supply circuit

NO → Power supply circuit check point

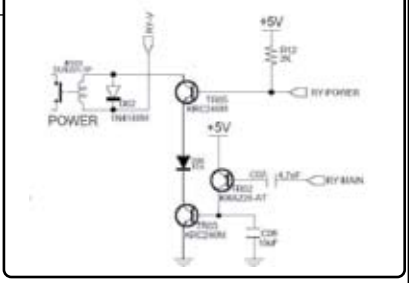


YES

Is the IC01 output of PCB normal?

NO → Do check Relay control circuit

NO → Relay control circuit check point



YES

Is high voltage dioed normal?

Checking high voltagecircuts

Is high voltage dioed normal?

NO

YES

Is high voltage capacitor normal?

NO → In case any of high voltage parts is damaged, check all parts related to high votlage.

YES

Is magnetron normal?

NO

4-3-18 If button malfunction

Buttons of the control panel do not work.

***Inspection method**

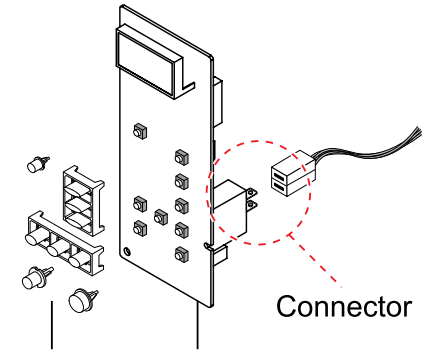
Are button pressed in the correct order?

NO → Refer to User Manual

YES

Is the connector of the control panel normal?

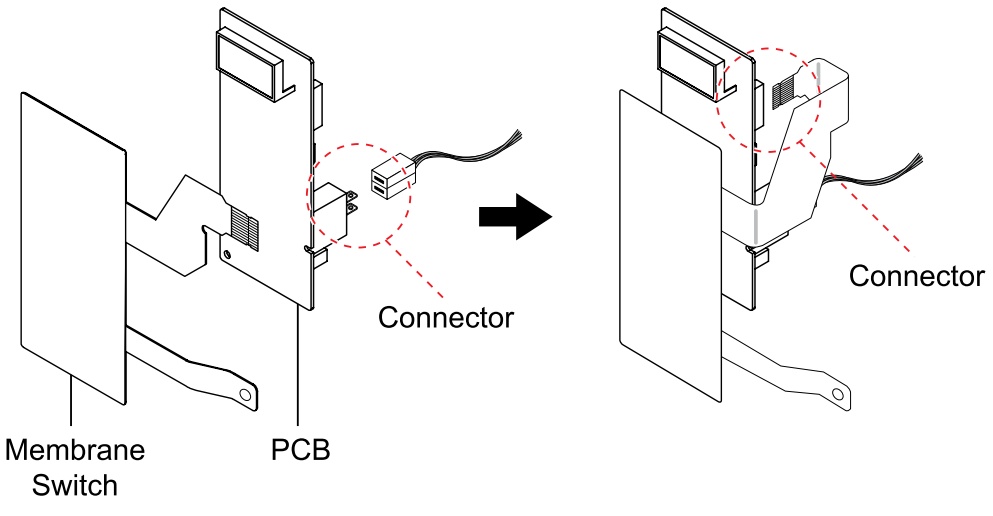
NO → Tact type



YES

Replace PCB.

Menbrane type



4-3-19 If food is not heated even though an oven works

Food is not heated even though an oven works.

***Inspection method**

Is the latch switch operating normally?

NO

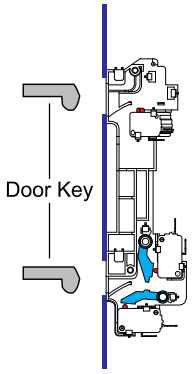
Method to control latch switch

YES

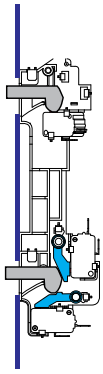
Checking high voltage circuits

Refer to "Checking high voltage circuits" on the previous page.

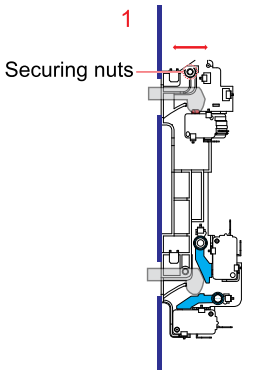
*Door open



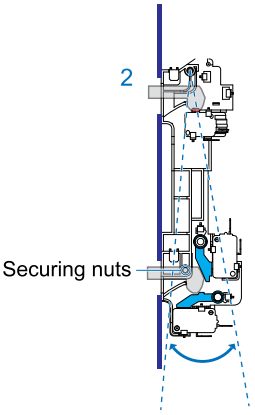
*Door closed



Method to control latch switch

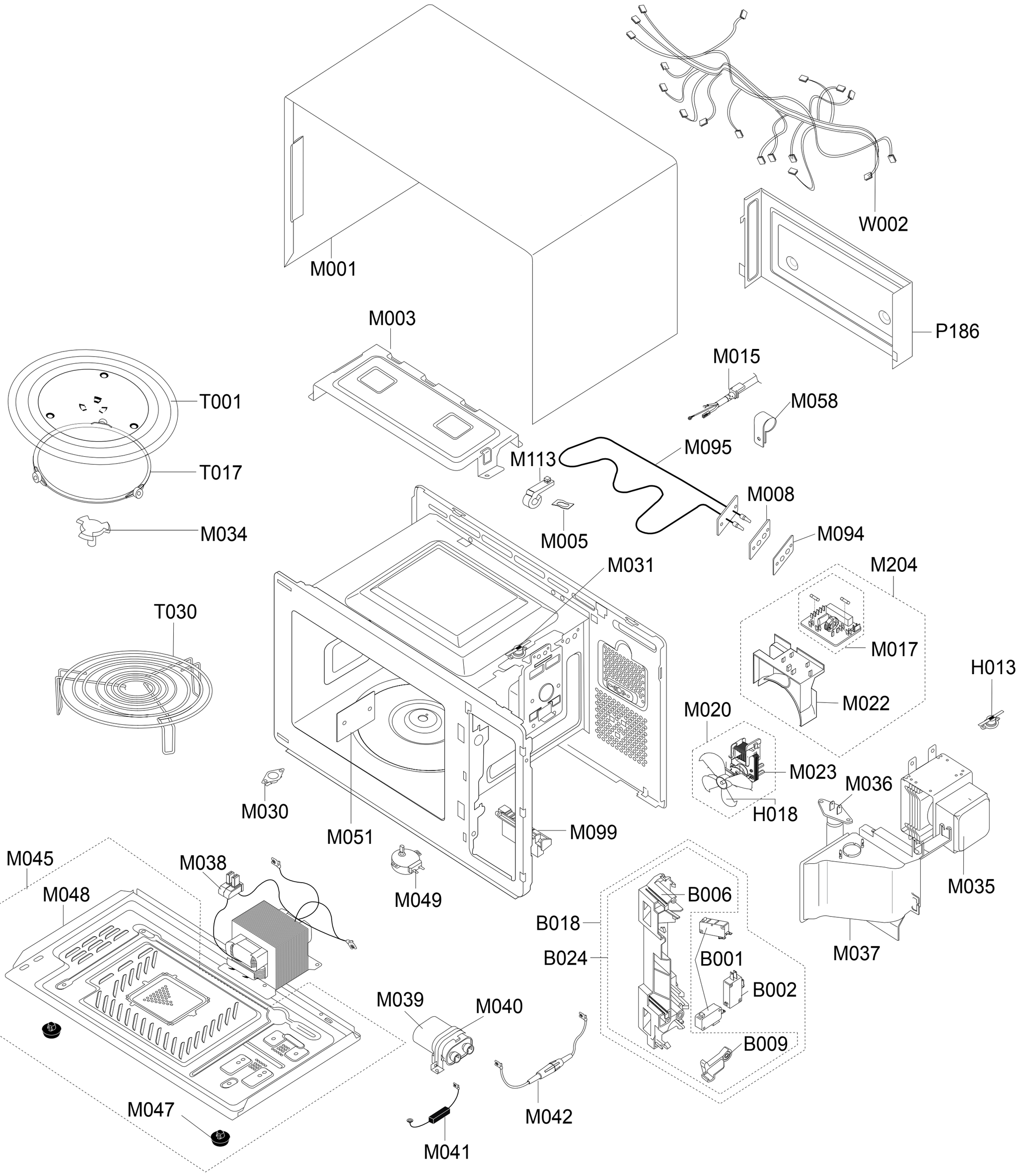


1. Loosenly tighten the nuts to check whether the primary interlock switch works by slightly moving latches to right and left.
Then firmly tighten nuts.



2. Loosenly tighten the nuts to check whether the secondary interlock switch and door sensing switch works by slightly moving latches to right and left.
Then firmly tighten nuts.

5-1 Exploded Views



5-2 Main Parts List

(S.N.A : SERVICE NOT AVAILABLE)

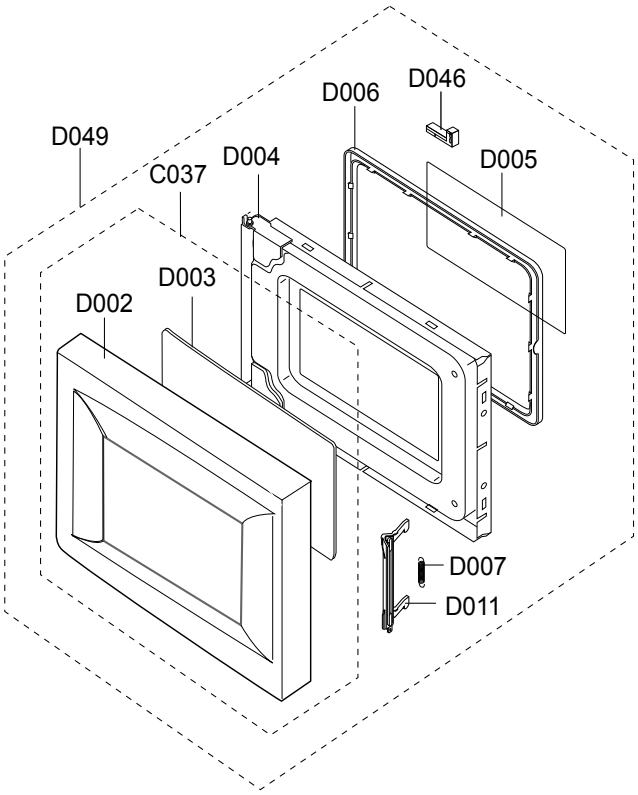
Level	No.	Code No.	Description	Specification	Q'ty	SA/ SNA	Remark
1-1	M036	4713-001046	LAMP-INCANDESCENT	240V,104mA,25W,ORG,-,-	1	SA	CV/AIR
1-1	M038	DE26-00099A	TRANS H.V	SHV-EURO1-1,230V,50Hz,2330V,3.	1	SA	-
1-1	M049	DE31-10154A	MOTOR SYNCHRONOUS	M2HJ49ZR02,ST-16,50/60	1	SA	-
1-1	M031	DE47-00002B	THERMOSTAT	PW2N,-,-,100,110,-,-,-,187H,3	1	SA	-
1-1	M095	DE47-00016A	HEATER	SHG-2638E,-,-,1100W(1080W),-,2	1	SA	-
1-1	H013	DE47-20009A	THERMOSTAT	PW2N-520PB,160/60,250V/7.5A,H	1	SA	MG-TCO
1-1	M030	DE47-20010A	THERMOSTAT	PW-2N(120/60)187Y,250V7.5A,12	1	SA	CAV-TCO
1-1	M003	DE61-00143A	BRACKET-UPPER	MW850WA,SECC,T0.5,-,-,-,NC	1	SA	-
1-1	M113	DE61-30008A	SUPPORT-HEATER	ALUMINA,-,T12,CE745G,-,	1	SA	-
1-1	M005	DE61-70060A	SPRING-PLATE	-,SK-5,T0.5,-,-,-,-,-,-,-,-	1	SA	-
1-1	M094	DE63-00048A	GASKET-STOPPER	CE2613N,SECC,T1.0,W53,L15	1	SA	-
1-1	M008	DE63-00049A	GASKET-HEATER	CE2613N,BRASS,T1.0,W53,L15	1	SNA	-
1-1	M001	DE64-01336B	PANEL-OUTER	CMO-0.8CUFT,EPOXY+SECC,T0.5,	1	SA	-
1-1	M058	DE65-20014A	CABLE CLAMP	-,-,-,NY-66,-,DA-6N	1	SNA	P-CORD
1-1	M099	DE66-90113A	LEVER-DOOR	PP(GB71),T2.5,-,-,12g,NT	1	SA	-
1-1	M034	DE67-00140A	COUPLER	NC2000(0.6~0.8),PPS(ESS840),-,	1	SA	-
1-1	M051	DE71-00159A	COVER-CEILING	CN2835,MICA SHEET,T0.3,W11	1	SA	-
1-1	P186	DE71-60451A	COVER-BACK	3RD-0.7,SECC,T0.5,W115,L332,-	1	SA	-
1-1	M037	DE71-60457C	COVER-AIR	3RD-0.7(BTM),PP(FH44N),-,-,-,-	1	SA	-
1-1	T001	DE74-20102B	TRAY-COOKING	2ND-07,GLASS,T5.0,M745,PI28	1	SA	-
1-1	T030	DE74-70071D	RACK-WIRE	MSWR10,PI3,0.7/NC2000,D230,H85	1	SA	-
1-1	M020	DE96-00031E	ASSY-MOTOR FAN	SMF-3RDEA,230V50HZ,2400RP	1	SA	-
1-2	M023	DE31-10184A	MOTOR FAN	SMF-3RDEA,230V50Hz,2400rpm,3rd	1	SA	-
1-2	H018	DE31-90057A	BLADE-FAN	PP,T1.5,-,3RD-W,-,-,-	1	SA	-
1-1	B018	DE96-00115U	ASSY BODY LATCH	CE2611N,NC2000(BUTTON)/T	1	SA	-
1-2	B002	3405-001032	SWITCH-MICRO	125/250VAC,16A,200GF,SPDT	1	SA	MON-SW
1-2	B001	3405-001034	SWITCH-MICRO	125/250VAC,16A,200GF,SPST-N	2	SA	DOOR-SW,PRI-SW
1-2	B024	DE96-00115V	ASSY BODY LATCH-SUB	MW850WA,NC2000(BUTTO	1	SA	-
1-3	B009	DE66-00088A	LEVER-SWITCH	NC2000(0.6/0.8/1.2),POM,-,	1	SA	-
1-3	B006	DE72-00138C	BODY-LATCH	NC2000(0.6/0.8/1.2),PP-FH44N,	1	SA	-
1-2	M041	0402-001554	DIODE-RECTIFIER	HV03-12T01,12000V,0.4A,D	1	SA	-
1-2	M039	2501-001016	C-OIL	950nF,2.1KV,BK,35x54x80,20mm	1	SA	-
1-2	M040	DE61-00139A	BRACKET-HVC	NC2000,SECC,T0.8,-,-,-,0.6/0	1	SA	-
1-2	M042	DE91-70061J	ASSY-H.V.FUSE	THV060T-0650-H,5KV0.65A,WL	1	SA	-
1-2	M045	DE96-00371A	ASSY BASE PLATE-SUB	M1719N/CE2719N(TSE),	1	SA	-
1-3	M047	DE61-40066A	FOOT	-,PP,-,BLK,-,-,-	1	SA	-
1-3	M048	DE80-00023A	BASE-PLATE	MW850WA,SGCC1,T0.6,-,-,NC2000	1	SA	-
1-1	W002	DE96-00204A	ASSY-WIRE HARNESS A	CE2713N,230V50HZ,NEW	1	SA	-
1-1	M015	DE96-00385C	ASSY POWER CORD	CEE,EU,250V/16A,1500mm,3	1	SA	-
1-1	M204	DE96-00417Q	ASSY-N/F+COVER	CE281DN/XEC,N/F+COVER	1	SA	-
1-2	M022	DE71-00148A	COVER-BLOWER	MW850WA,PP,T1.5,-,-,-,NTR,N	1	SA	-
1-2	M017	DE96-00399D	ASSY NOISE FILTER	SN-UF11D,250V/15A,CE29	1	SA	-
1-1	T017	DE97-00193B	ASSY-GUIDE ROLLER	NC2000 0.6,T2*P1198(14	1	SA	-

5-2 Main Parts List

(S.N.A : SERVICE NOT AVAILABLE)

Level	No.	Code No.	Description	Specification	Q'ty	SA/ SNA	Remark
1-1	M035	OM75S(31)MTMN	ASSY-MGT		1	SA	-

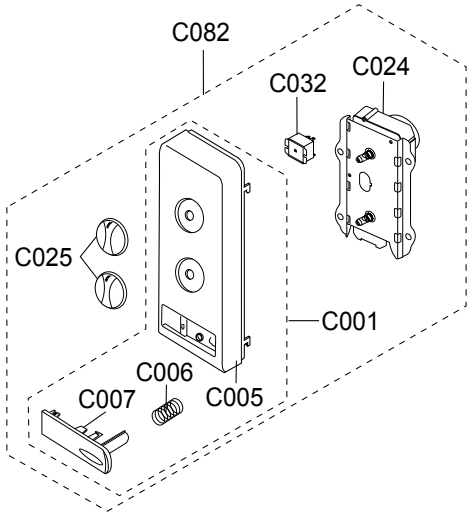
5-3 Door Parts List



(S.N.A : SERVICE NOT AVAILABLE)

Level	No.	Code No.	Description	Specification	Q'ty	SA/SNA	Remark
1-1	D049	DE94-00734A	ASSY DOOR	CE2618NR/CE2638NR/BWT,PURE-WHT	1	SA	-
1-2	D005	DE01-00112C	FILM-DOOR	-,CE2618N/CE2717N,PET,T0.15,W1	1	SA	DOOR-E
1-2	D007	DE61-00198A	SPRING-KEY	M1877,HSWR,PI0.7,-,D6,23 1/4,	1	SA	-
1-2	D011	DE64-40006F	DOOR-KEY	POM(F20-02),-,-,12G,BLK,MW7897	1	SA	-
1-2	D006	DE64-00283A	DOOR-C	NC2000 0.7(NEW),PP,-,BLK,-,T1.	1	SA	-
1-2	D046	DE64-00284A	DOOR-CAP	NC2000 0.7(NEW),PP,-,BLK,-,T1.	1	SA	-
1-2	D037	DE94-00746K	ASSY DOOR-A	M1618R/BWT,P/WHT,PUR-ASSY	1	SA	-
1-3	D002	DE64-00091T	DOOR-A	M1618R/BWT,ABS,-,P/WHT,-,-,-	1	SA	-
1-3	D003	DE67-20186A	SCREEN-DOOR	3RD-0.7CU.FT,SAN,T2.2,W354,L	1	SA	-
1-2	D004	DE92-50133N	ASSY DOOR-E	MW4593G,BLK,3RD(0.7)	1	SA	-

5-4 Control Parts List



(S.N.A : SERVICE NOT AVAILABLE)

Level	No.	Code No.	Description	Specification	Q'ty	SA/SNA	Remark
1-1	C082	DE94-00610M	ASSY CONTROL-BOX	230V49HZ,CE2718NR/BWT,P	1	SNA	-
1-2	C032	3501-000309	RELAY-POWER	240V,3750VA,15000MA,-,6MS,20	1	SA	-
1-2	C024	DE45-00003A	TIMER	TMFK60M1A1,-,21V50HZ,-,50HZ,-,	1	SA	-
1-2	C025	DE64-00269A	KNOB	M1912,ABS,-,-,-,-,WHT,-,-	1	SA	-
1-2	C001	DE94-00611M	ASSY CONTROL-PANEL	230V49HZ,CE2718NR/BWT	1	SA	-
1-3	C005	DE64-00462N	CONTROL-PANEL	CE2718NR/BWT,ABS,-,-,-,-,P	1	SA	-
1-3	C007	DE66-20275A	BUTTON-PUSH	3RD-W S1 MW5592W,-,-,-,-,9g	1	SA	-
1-3	C006	DE61-70026A	SPRING-BUTTON	-,SWP,PI0.7,D17,-,L25.8,-,	1	SNA	-

5-5 Standard Parts List

(S.N.A : SERVICE NOT AVAILABLE)

Level	Code No.	Description	Specification	Q'ty	SA/ SNA	Remark
1-1	6002-001321	SCREW-TAPPING	PWH,+,2S,M5,L10,ZPC(YEL)	2	SNA	HVT,MGT
1-1	6002-001325	SCREW-TAPPING	TH,TORX,2S,M4,L12,ZPC(YEL)	1	SA	C-BACK
1-1	6006-001170	SCREW-TAPPING	TH,+,WT,TC,M4,L10,ZPC(WHT)	3	SNA	P/OUTER,P-CORD,N/FILTER
1-1	6006-001174	SCREW-ASSY TAPP	WE,TH,+,M4,L12,ZPC(YEL)	6	SNA	OUT-PANEL,COVER-AIR,CON-BOX,C-BLOWER,B-P
1-1	6006-001176	SCREW-ASSY TAPT	WT,PH,+,M4,L8,ZPC(YEL)	2	SNA	MGT-TCO,D-MOTOR
1-1	DE60-30016A	NUT-FLANGE	M4,MSWR10,-,-,-,-,-,-	2	SA	F-MOTOR,HEATER
1-2	6002-000234	SCREW-TAPPING	TH,+,-,2S,M4,L16,ZPC(WHT),	1	SA	TIMER
1-2	6006-001174	SCREW-ASSY TAPP	WE,TH,+,M4,L12,ZPC(YEL)	1	SNA	RELAY
1-2	6006-001176	SCREW-ASSY TAPT	WT,PH,+,M4,L8,ZPC(YEL)	1	SNA	HVD

6-1 Wiring Diagrams

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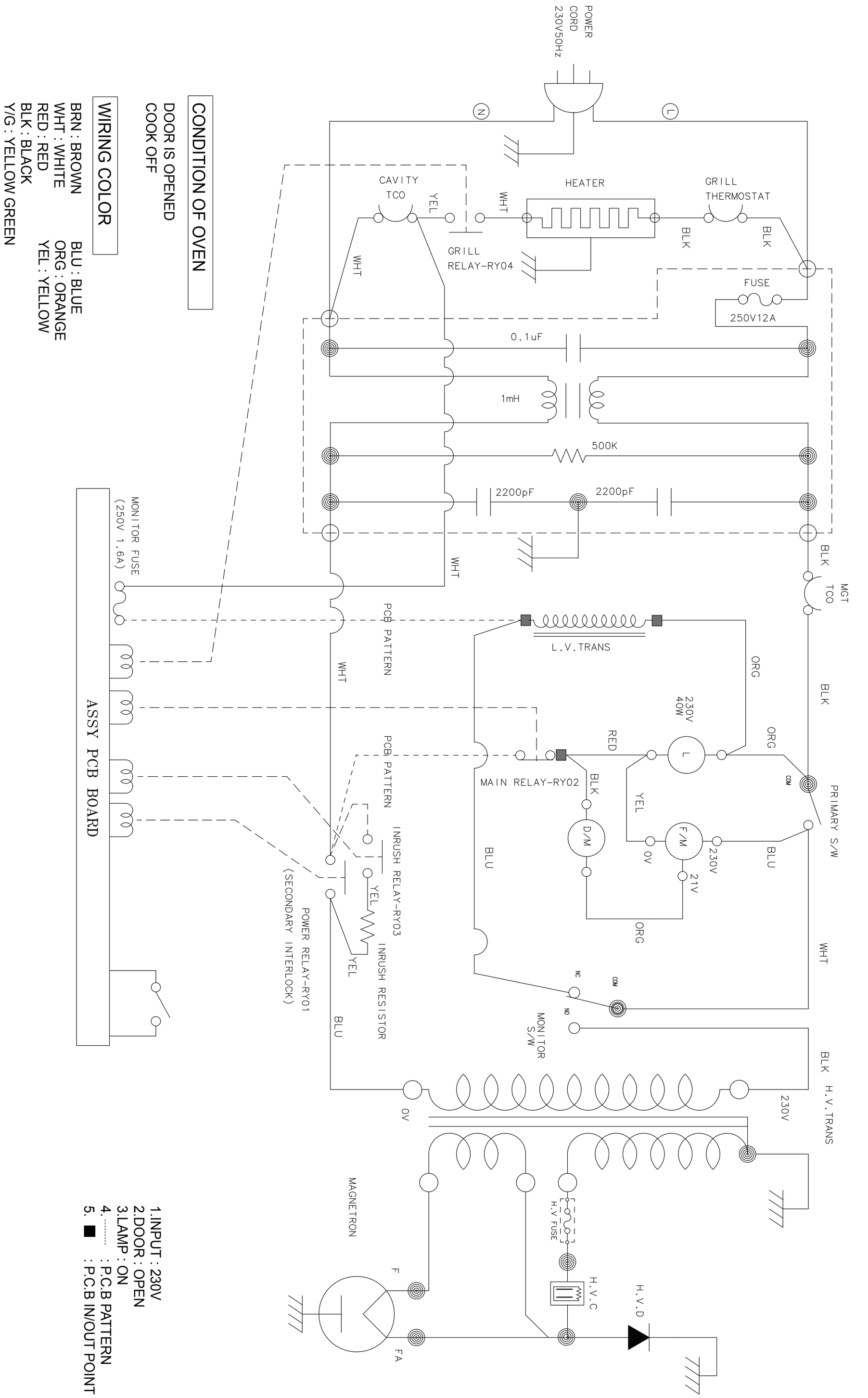

6-1 Wiring Diagrams

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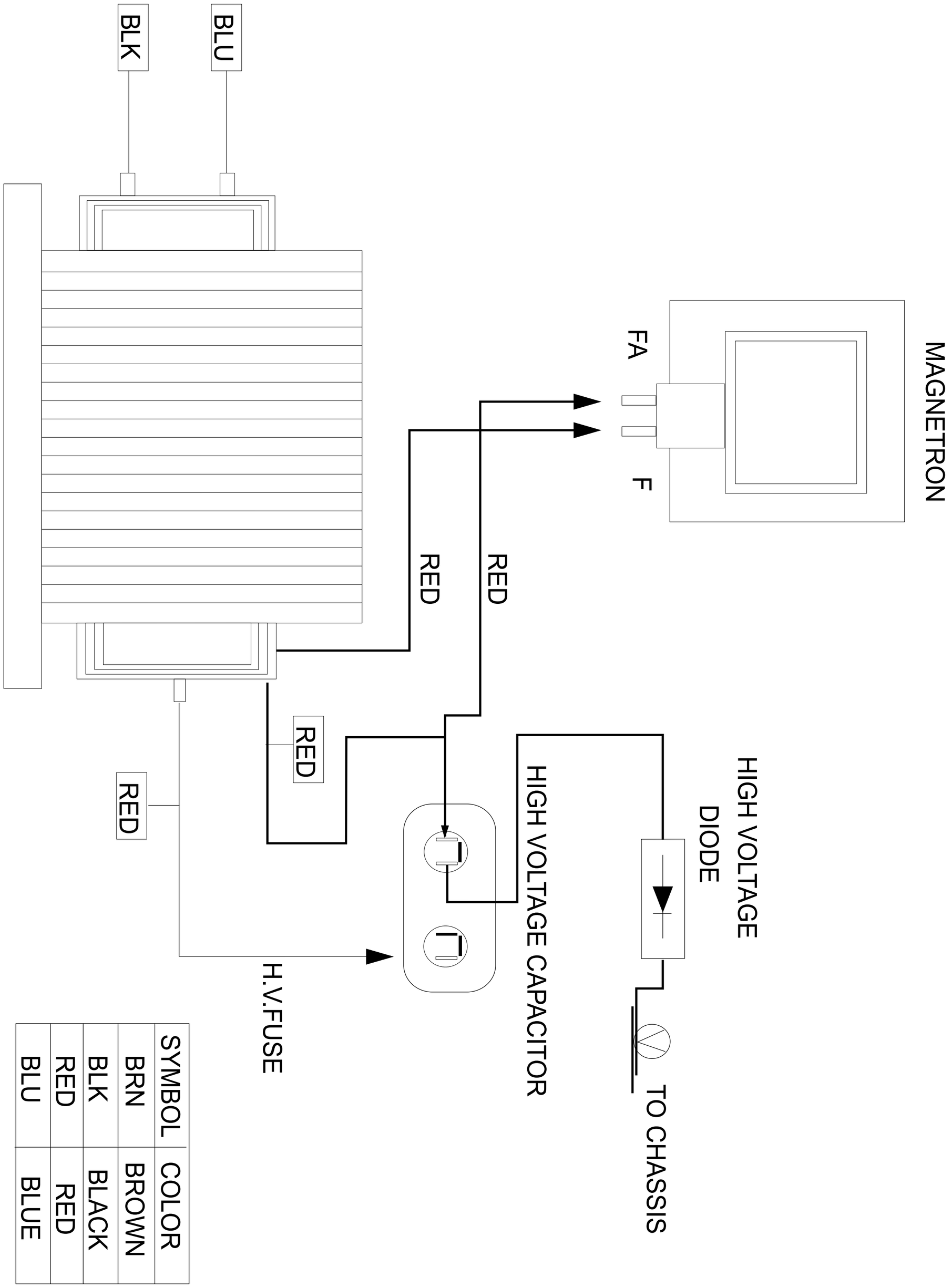

SYMBOL	COLOR
BRN	BROWN
BLK	BLACK
RED	RED
BLU	BLUE

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